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TRENDS IN CATCHES AND LANDINGS

MEDITERRANEAN AND BLACK SEA FISHERIES: 1972 - 1991

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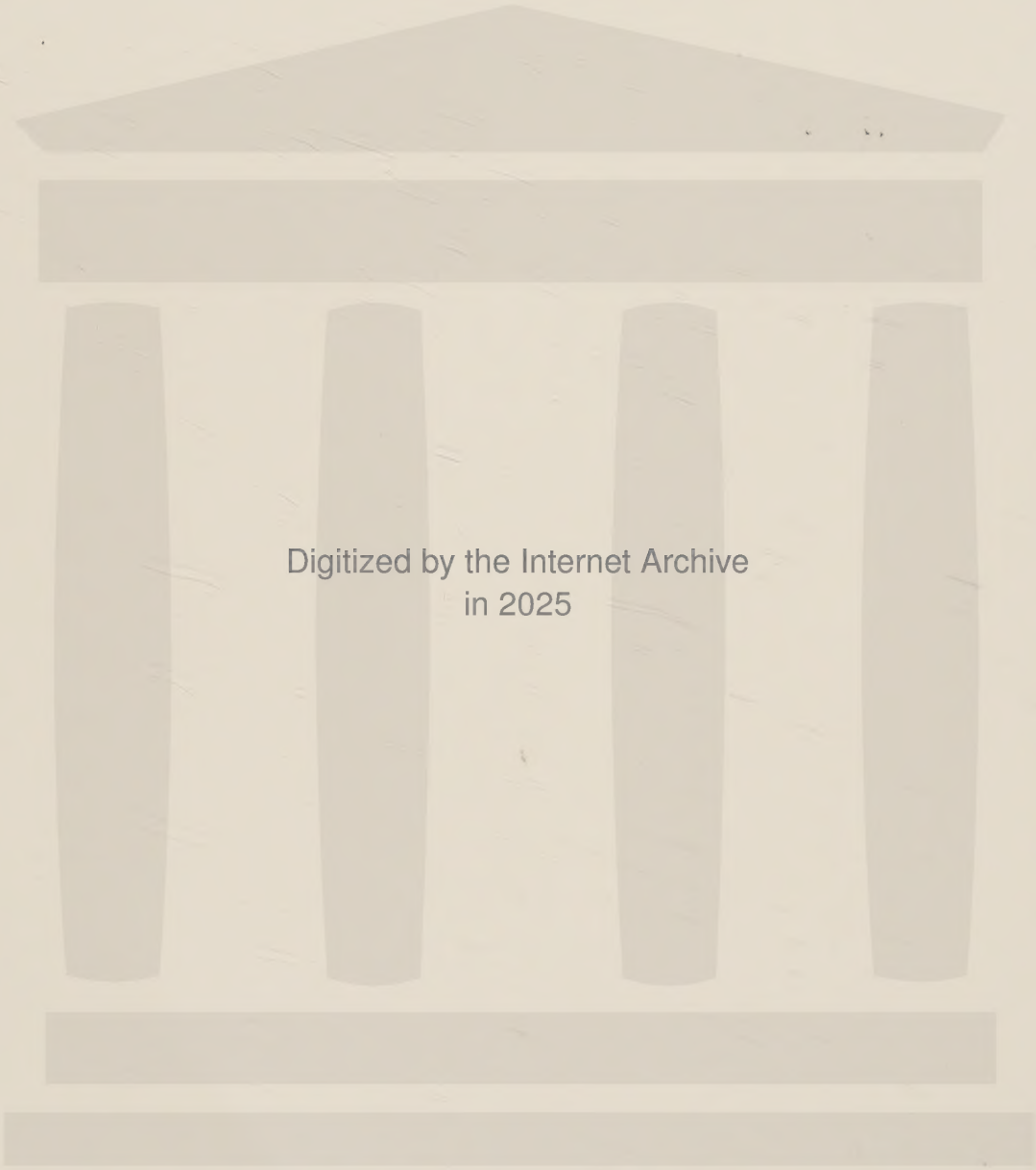

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TRENDS IN CATCHES AND LANDINGS

MEDITERRANEAN AND BLACK SEA FISHERIES: 1972 - 1991

by

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ROME, May 1993

PREPARATION OF THE DOCUMENT

The document gives the trends in fish catches by species and by area from 1972 to 1991, in graphic form for the Mediterranean and the Black Sea. It has been prepared in order to facilitate interpretation of data contained in the FAO Yearbooks of Fishery Statistics, "Catches and Landings" and in the Statistical Bulletin of the General Fisheries Council for the Mediterranean (GFCM). Included are tables indicating changes in species landed and proportions of total catches referring to 1972, 1982 and 1991.

The document includes trends for the entire Mediterranean and Black Sea, as well as for each statistical division.

Stamatopoulos, C.
Trends in catches and landings. Mediterranean and Black Sea fisheries: 1972 - 1991.
FAO Fisheries Circular. No. 855.4. Rome, FAO. 1993. 177p.

ABSTRACT

The document provides catch time series of the Mediterranean and Black Sea fisheries over the period 1972-1991. Trends are illustrated by means of line graphs and summary tables. Also examined are proportions of species to total catches and the changes in the proportions over three distinct periods in 1991, 1982 and 1972. Changes in catch time series have been examined for the whole Mediterranean and Black Sea as well as for each of the eleven statistical divisions.

The FAO Fisheries Circular is a vehicle for distribution of short and ephemeral notes, lists, etc., including provisional versions of documents to be issued later in other series.

FOREWORD

It is not the intention in this Circular to attempt an interpretation of the included time series of landings, but mainly to provide fishery researchers with more ready access and visualization of the main trends of fish landings by species and statistical divisions, than is possible from inspection of the tabular material in the FAO Statistical Yearbooks and GFCM Bulletins.

The reader is referred to the reports of the Council Sessions and of the subsidiary bodies of the Council dealing with statistics, resources and socio-economic issues for further studies that may throw light on some of the resource trends. Evidently, however, there is an urgent need to contrast these data with more detailed studies going on throughout the Mediterranean, in order to arrive at appropriate interpretations of some of the dramatic trends revealed in these data series. The reader is also referred to GFCM Studies and Reviews No 63, for a discussion on trend issues. In broad terms, apparent trends in landings may be viewed as functions of the following four factors:

- changes in the level of accuracy of reporting;
- trends in fishing intensity on the species in question;
- environmental trends in the productivity of the system;
- socio-economic factors affecting relative demand or accessibility of the species in question.

With respect to the accuracy of statistical reporting, it is clear that major improvements are still required by member countries, and any corrections on the time series included here will be gratefully received by the Fishery Information, Data and Statistics Service of FAO. It should be remembered also that the time series predominantly reflect events in the industrial, as opposed to artisanal fisheries. Although landed quantities may be underestimated in many cases, it seems likely that the overall direction of the trends in landings is correctly reflected in these time series.

Although none of the other factors listed above can be excluded from operation over the period in question, the continued increase in demand, and the increase in fishing intensity, at least up until recent years, cannot be questioned. Given that overfishing has been a concern of the Council over the whole period of the time series

presented, it has been queried however whether the continued rise in landings is simply a function of increasing fishing effort, since this should logically have led to a decline in the productivity of overfished stocks. There is now growing evidence that environmental factors also play a significant role in fluctuations or trends in abundance of some Mediterranean fishery resources.

The evidence is both direct and indirect that enrichment of the formerly nutrient-limited Mediterranean ecosystem by nutrient runoff from human activities has been occurring, particularly in the more heavily populated northern basins of the Mediterranean and Black Sea system. Although accompanied by other non-biodegradable pollutants which are also of considerable concern as potential contaminants of fish products, the rise and subsequent collapse of the fisheries of the Black Sea and its associated seas (Azov and Marmara) over the last few years appear to have been associated with not only increases in fishing effort, but also to nutrient runoff in combination with the introduction of undesireable exotic species into this subsystem. Here, the ctenophore Mnemiopsis leydei deserves particular mention; a predator on, and competitor with planktonic larval stages of commercial species.

Although many details of the Mediterranean marine ecosystem have been intensively studied, it appears that the pace of change in the resource and environment is accelerating, but unfortunately a great number of questions related to its behaviour as a system are poorly understood and are in need of urgent investigation. One example is given in Figure V showing trends for sardine and anchovy landings in each statistical division. A general inverse relationship appears to apply for these two species in most areas, with much lower landings of anchovy occurring in the most recent years. Leaving aside the Black Sea ecosystem described above, one could ask whether these dramatic changes represent cyclic changes in the balance between the two species, or is the Mediterranean pelagic ecosystem now being more seriously stressed than previously by a combination of fishing and environmental change? Evidently, the resolution of such problems require priority attention and collaborative work between the member countries of GFCM, and it is hoped that this Circular will prove useful into contributing towards this objective.

J. F. Caddy
Technical Secretary, GFCM

INTRODUCTORY NOTE

Throughout the document, catch statistics are presented by two types of standard tabulations. Tables of the first type refer to catches in 1991 and show the ranking order of the GFCM statistical divisions in relation to their proportions of the total catch for the Mediterranean and Black Sea. The same approach is used to illustrate the ranking order and catch proportions of species in the entire Mediterranean and Black Sea, as well as in each division.

Tables of the second type are for comparison of the proportions of the same divisions and species in 1991, and in 1982 and 1972. The purpose of this approach is to allow for the identification of any significant changes in ranking and catch proportions between the three periods. The results are supplemented by graphical presentations of catches by species and by division for all years 1972 - 1991.

For the entire Mediterranean and Black Sea, the production of all diadromous and marine fish, crustaceans and molluscs in the eleven statistical divisions, had been steadily increasing over the period 1972-1988 from 1,140,000 t. to 2,080,000 t. In 1991 total production was decreased to 1,400,000 t., which is equivalent to a 30% decrease with respect to the 1988 level, as indicated by the last plot on Page 7.

The overall decline in the past four years is mainly due to the significant decrease of production in the Sea of Azov and the Black Sea and, to a lesser extent, in the Adriatic, Sardinia and the Balearic, as indicated in Figure I. On the other hand, production in the Ionian, Aegean, Gulf of Lions, Levant, and Sea of Marmara, has shown a steadily increasing trend over the period 1972-1991 as indicated in Figure II which, however, did not offset the overall decline in the whole area of the Mediterranean and Black Sea over the last four years.

The net effect of the different trends in the two groups of statistical divisions shown in Figures I and II, was a significant shift in the total production by statistical division (Table 1.1.3 on Page 5). In 1991 and with respect to total production, the Ionian and Balearic areas were ranked in the two top places, replacing the Black Sea (ranked first in 1972 and 1982, fourth in 1991), and the Adriatic (second in 1972 and 1982, third in 1991).

Figure III provides an indication of the declining production of some important species during 1988-1991. Except for the European pilchard which shows the least notable decline, other major species such as European anchovy, Mediterranean horse mackerel, Azov tyulka and European sprat, have shown a sharp decrease in the past four years. The relatively stable and occasionally increasing trend of other species such as mussels (with a significant proportion from marine culture), European hake, Bogue and Sardinellas nei, is given in Figure IV.

Figure V illustrates the distibution of catches of European pilchard and European anchovy in each statistical division.

FIGURE I
Areas in decline during 1988 - 1991

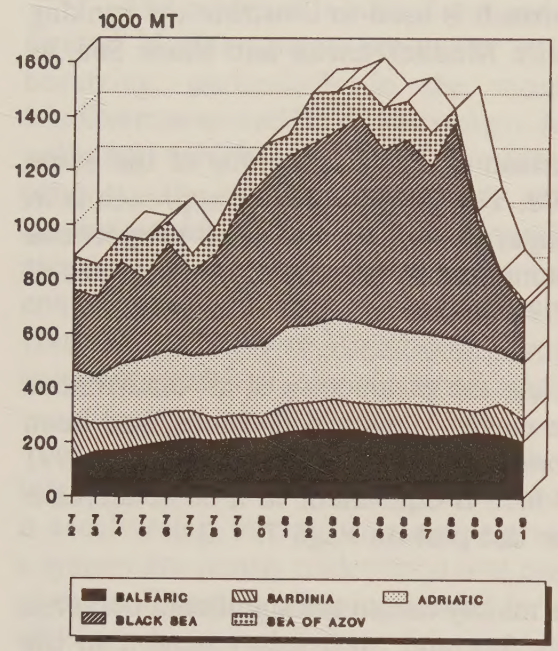
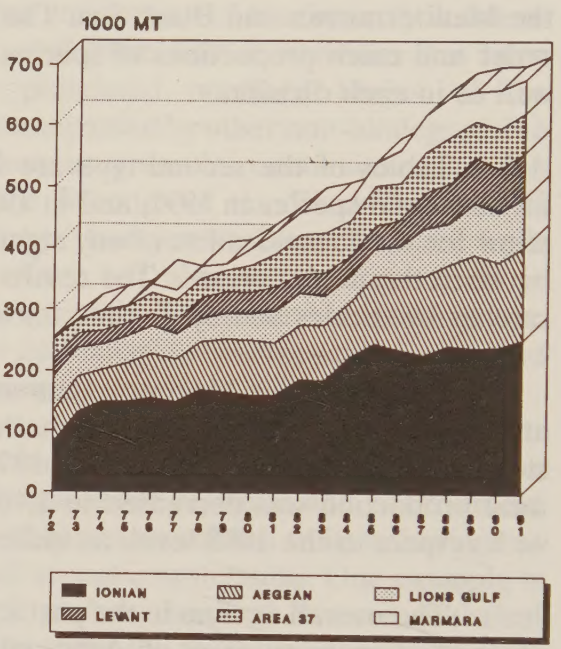


FIGURE II
Areas in increase during 1972 - 1991



- AREA 37 contains all tuna catches -

FIGURE III
Major declining species in 1988-1991

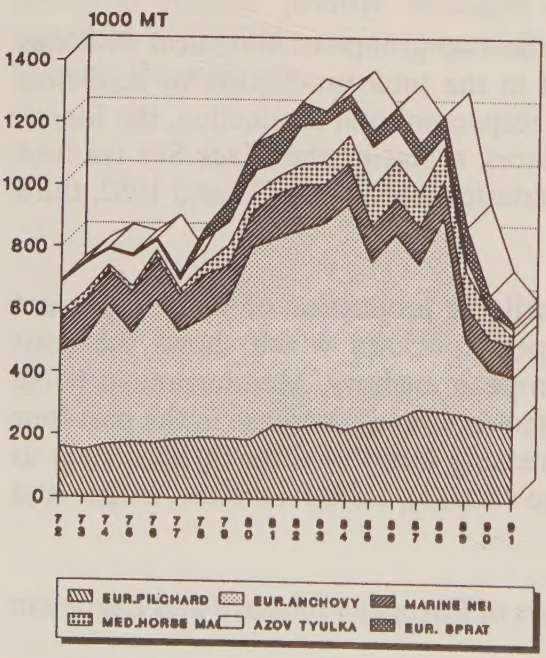


FIGURE IV
Stable-increasing species in 1972-1991

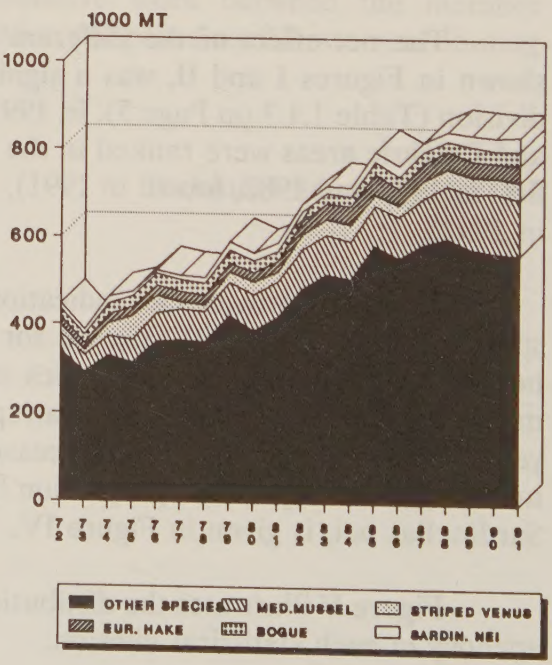


FIGURE V - Production of European pilchard and European anchovy by statistical division

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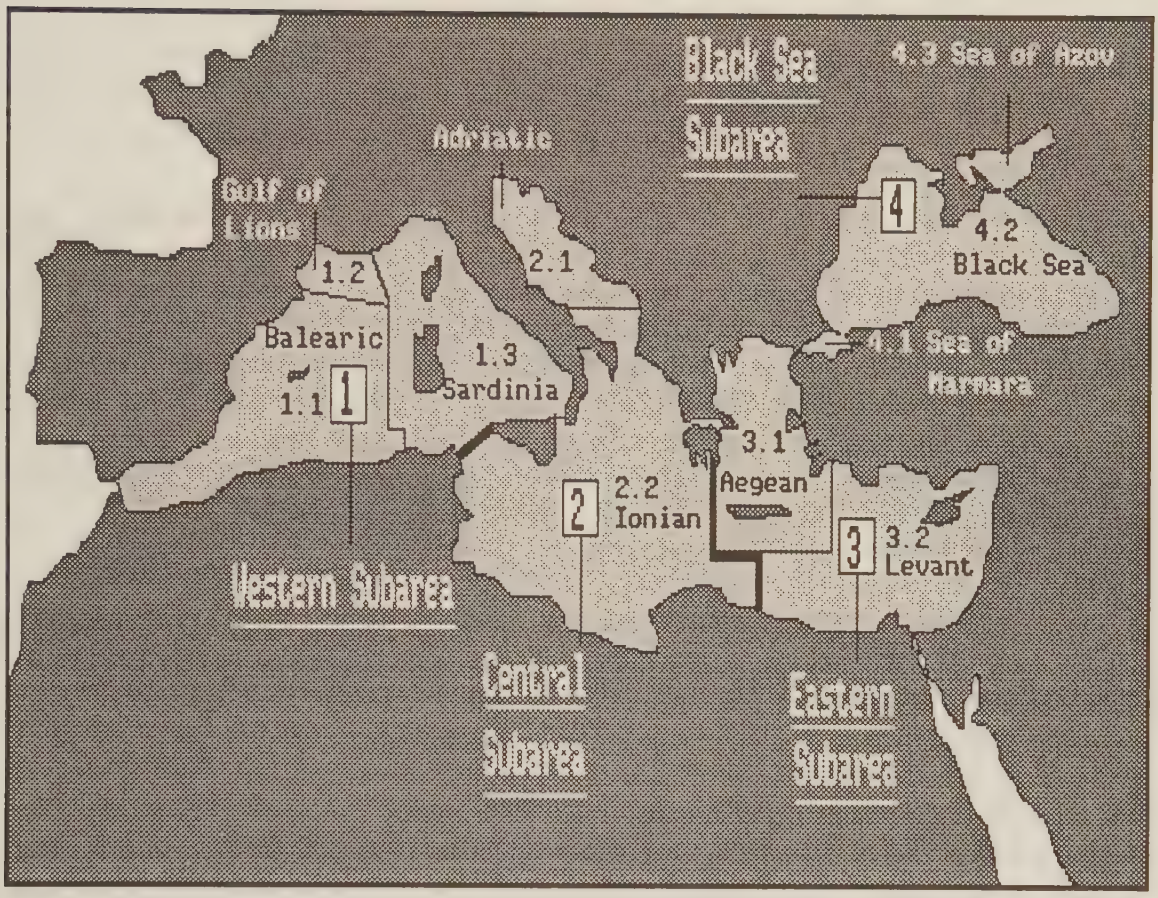
1. MEDITERRANEAN AND BLACK SEA

STATISTICAL SUB-AREAS AND DIVISIONS



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Italy:30.34%, Turkey:22.62%, Spain:9.03%, Greece:8.62%, Tunisia:6.46%, Algeria:5.68%, France:4.85%, Former USSR:3.70%, Egypt:2.86%, Morocco:2.09%, Yugoslav SFR:1.68%, Libya:0.55%, Albania:0.47%, Israel:0.24%, Bulgaria:0.21%, Cyprus:0.19%, Lebanon:0.12%, Syria:0.11%, Romania:0.09%, Malta:0.05%, Gaza Strip:0.04%, Japan:0.01%, Monaco:0.00%, Gibraltar:0.00%.

NOTES ON PRESENTATION

Throughout the document catch statistics are presented by two types of tables. Tables of the first type refer to 1991 catches and illustrate the ranking orders of the GFCM[1/] sub-areas and divisions for statistical purposes in relation to their proportions of the total catch. This approach is also used for ranking species within each major species group. Tables of the second type are constructed for comparison purposes to show the proportions of the same areas and species for the years 1982 and 1972. This allows the identification of any significant changes in ranking and catch proportions between the three periods. The results are supplemented by graphical presentations of catches by sub-area division and species for all years 1972 - 1991.

Table type 1

Table 1.1.1 on Page 4 provides an example of sub-area divisions ranked by 1991 catches. It indicates that in 1991 Ionian was ranked first with 252,190 MT which is equivalent to 18% of the total production in the Mediterranean and Black Sea in 1991.

Table 1.2.1 on Page 8 uses the same approach for ranking species within a major group (diadromous fish and marine fish) and with respect to 1991 catches. It indicates that in 1991 European anchovy was ranked second with 162,150 MT which is equivalent to 15.2% of the total production of diadromous and marine fish in the Mediterranean and Black Sea.

Tables of this type also provide linear trends which have been formulated by examining the time series of catches for the period 1972-1991 and calculating relative indices of increase, expressed in percentage form, and varying from -100% to +100%. These were grouped to represent basic trend categories using the following criteria:

50% to 100%	Sharp rise	-100% to -50%	Sharp decline
5% to 50%	Rising	-50% to -5%	Declining
0% to 5%	Stable (+)	-5% to 0%	Stable (-)

1/ General Fisheries Council for the Mediterranean

Table type 2

Table 1.1.3 on Page 5 provides an example of a comparison of ranking orders and proportions applied to GFCM sub-area divisions for the years 1991, 1982 and 1972. The table indicates that the ranking order of total catches by sub-area division was changed at the top when Ionian was shifted from the sixth place in 1972 to the first place in 1991.

Table 1.2.3 on Page 9 compares the ranking orders and proportions of catches by species of the group of diadromous and marine fish, for the years 1991, 1982 and 1972. Its second entry indicates that in 1972 European anchovy was ranked first with 305,496 MT (30.5% of the 1972 production). In 1982 it remained first with 629,296 MT (36.6%) and in 1991 it was ranked second with 162,150 MT (15.2%).

Line graphs

Each plot consists of a line graph and explanatory remarks referring to a combination of country-species-area. Additional statistics, in percentage form, are provided for measuring the relative fluctuation of a time series and its linear trend.

Plotted data refer to the period 1972 - 1991 and are expressed in metric tons. Graphs are scaled from 0 to the maximum production figure in the plotted time series in order to facilitate comparisons between different sets of data. The percentages to total production (same figures as those in Table type 1) are used for the formulation of cumulative percentages indicating total proportions in a progressive manner.

The fluctuation index is expressed in percentage form and is calculated on the basis of the minimum and maximum values of a catch time series. The highest fluctuation (i.e 100%) occurs when minimum and maximum alternate on a year-to-year basis. The lowest fluctuation (i.e 0%) occurs when a time series is progressively increasing or decreasing, without breaking points in its shape.

The trend index (see note on Table 1), is also expressed in percentage form and is calculated by means of a normalized linear regression of production over time.

1.1 Diadromous fish, marine fish, crustaceans and molluscs

Table 1.1.1

MEDITERRANEAN AND BLACK SEA
Total production of diadromous fish, marine fish, crustaceans and molluscs by sub-area division ranked by 1991 production

AREA	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Ionian	1	252190	18.0 %	Rising
Balearic	2	209537	14.9 %	Rising
Adriatic	3	208972	14.9 %	Stable (+)
Black Sea	4	199788	14.2 %	Rising
Aegean	5	150676	10.7 %	Rising
Sardinia	6	82040	5.9 %	Stable (-)
Gulf of Lions	7	79413	5.7 %	Rising
Levant	8	73753	5.3 %	Rising
Area 37 - Total Tuna	9	64556	4.6 %	Rising
Sea of Marmara	10	55662	4.0 %	Rising
Sea of Azov	11	26513	1.9 %	Declining
MEDITERRANEAN AND BLACK SEA		1403100	100.0 %	Rising

Note: The analytical description of the overall trend is based on a linear regression of production over time for the entire period 1972-1991 and consequently may not reflect the partial trend of recent years (such as the recent decline in the Black Sea). A more accurate description of the shape of a time series may be obtained from the line plots that supplement the presented tabulated data.

Table 1.1.2

MEDITERRANEAN AND BLACK SEA
Proportions of top 28 species based on 1991 production

European pilchard(=Sardine):16.65%, European anchovy:11.56%, Mediterranean mussel:9.02%, Marine fishes nei:6.83%, Striped venus:2.88%, European hake:2.78%, Bogue:2.33%, Mediterranean horse mackerel:2.29%, Sardinellas nei:2.22%, Atlantic bonito:1.83%, Natantian decapods nei:1.81%, Azov tyulka:1.74%, Mullets nei:1.68%, Whiting:1.61%, Jack and horse mackerels nei:1.58%, Chub mackerel:1.45%, Common cuttlefish:1.33%, European sprat:1.32%, Picarels:1.25%, Surmullets(=Red mullets):1.24%, Carpet shells nei:1.14%, Northern bluefin tuna:1.10%, Marine molluscs nei:1.07%, Bluefish:1.02%, Common octopus:0.93%, Octopuses:0.90%, Blue whiting(=Poutassou):0.83%, Swordfish:0.83%, OTHER SPECIES 0.17%.

Production figures include quantities from marine culture. Table 1.1.4 illustrates the major producers and species based on 1990 production.

A series of line plots for each statistical division and in the ranking order of Table 1.1.1 is given on Pages 6 - 7.

Table 1.1.3

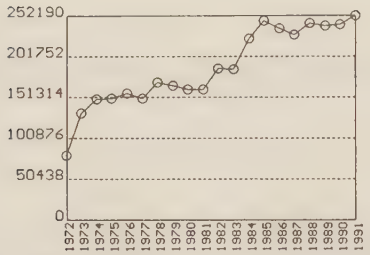
MEDITERRANEAN AND BLACK SEA
Total production of diadromous fish, marine fish, crustaceans and molluscs
Comparison of sub-area divisions in 1972, 1982 and 1991

AREA	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Ionian	1	187208	5 9.6%	80028	6 7.0%
Balearic	2	252470	3 13.0%	134702	4 11.8%
Adriatic	3	283073	2 14.5%	175539	2 15.4%
Black Sea	4	667626	1 34.3%	294933	1 25.9%
Aegean	5	89081	7 4.6%	51910	8 4.6%
Sardinia	6	97562	6 5.0%	155760	3 13.7%
Gulf of Lions	7	50941	9 2.6%	57005	7 5.0%
Levant	8	31208	11 1.6%	28507	10 2.5%
Area 37 - Total Tuna	9	64124	8 3.3%	33544	9 3.0%
Sea of Marmara	10	37112	10 1.9%	3855	11 0.3%
Sea of Azov	11	189046	4 9.7%	121902	5 10.7%
TOTALS		1949451	100.0%	1137685	100.0%

Table 1.1.4

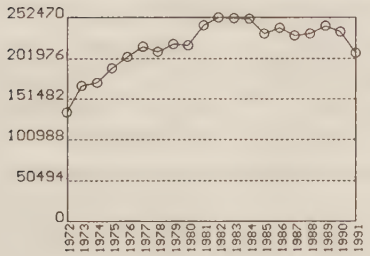
MEDITERRANEAN AND BLACK SEA
Marine Culture - Major producers and species based on 1990 ranking

COUNTRY	SPECIES	1984	1985	1986	1987	1988	1989	1990
Italy	Med. mussel	60000	65000	67000	68131	85400	80000	80000
Italy	Carpet shells nei	0	0	0	0	0	7500	10000
Egypt	Flathead grey mullet	0	0	0	0	0	0	9000
Italy	European flat oyster	5000	5000	5000	5000	5000	5000	5000
Italy	Mullets nei	2100	2100	3500	2300	2300	2100	2300
Albania	Med. mussel	906	902	1752	1808	3107	1840	1840
Greece	Med. mussel	200	200	230	380	1100	1500	1600
Italy	Flathead grey mullet	1100	1100	1700	1200	1200	1100	1200
Turkey	Gilthead seabream	0	0	34	65	100	798	1031
Yugoslav SFR	Med. mussel	1290	731	1085	1076	1370	1093	650
OTHER	Other species	1165	1496	2323	2356	3679	5759	7147
TOTALS		71761	76529	82624	82316	103256	106690	119768



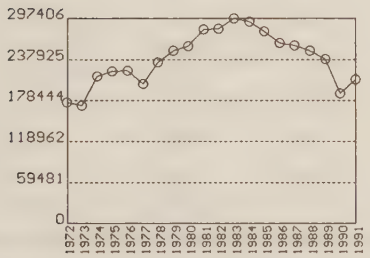
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Ionian
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 12.93 %
Rank..... 1 of 12 based on:1991
Percent to total..... 17.97 % , Cumulative: 17.97 %



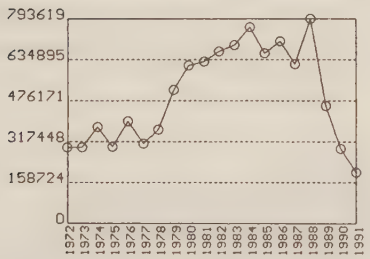
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Balearic
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 5.54 %
Rank..... 2 of 12 based on:1991
Percent to total..... 14.93 % , Cumulative: 32.91 %



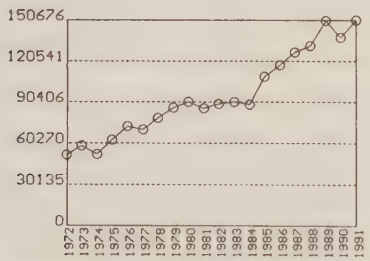
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Adriatic
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 3.27 %
Rank..... 3 of 12 based on:1991
Percent to total..... 14.89 % , Cumulative: 47.80 %



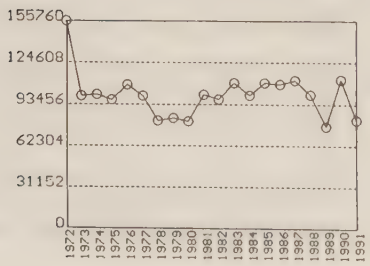
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Black Sea
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 7.34 %
Rank..... 4 of 12 based on:1991
Percent to total..... 14.24 % , Cumulative: 62.04 %



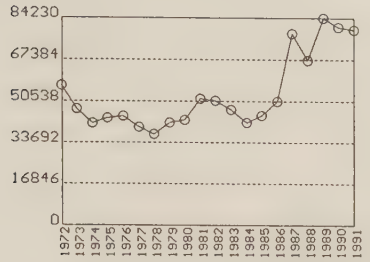
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Aegean
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 17.16 %
Rank..... 5 of 12 based on:1991
Percent to total..... 10.74 % , Cumulative: 72.78 %



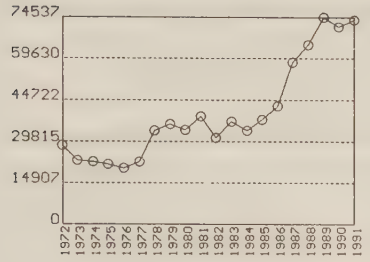
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Sardinia
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -2.40 %
Rank..... 6 of 12 based on:1991
Percent to total..... 5.85 % , Cumulative: 78.63 %



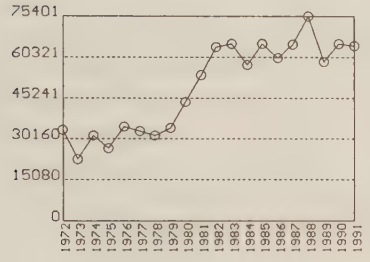
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Gulf of Lions
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 10.92 %
Rank..... 7 of 12 based on:1991
Percent to total..... 5.66 % , Cumulative: 84.29 %



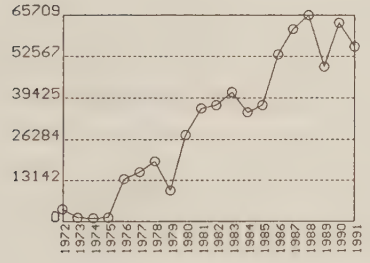
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Levant
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 21.40 %
Rank..... 8 of 12 based on:1991
Percent to total..... 5.26 % , Cumulative: 89.54 %



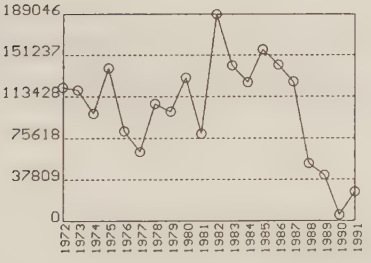
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Area 37 - Total Tuna
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 16.24 %
Rank..... 9 of 12 based on:1991
Percent to total..... 4.60 % , Cumulative: 94.14 %



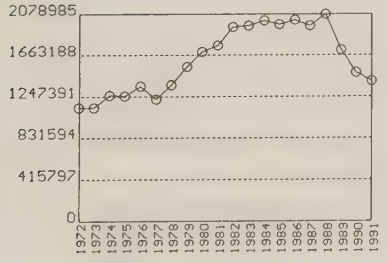
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Sea of Marmara
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 35.97 %
Rank..... 10 of 12 based on:1991
Percent to total..... 3.97 % , Cumulative: 98.11 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....Sea of Azov
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -9.01 %
Rank..... 11 of 12 based on:1991
Percent to total..... 1.89 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....ALL SPECIES
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 7.37 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

1.2 Diadromous fish and marine fish.

Table 1.2.1

MEDITERRANEAN AND BLACK SEA

Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European pilchard(=Sardine)	1	233662	21.8 %	Rising
European anchovy	2	162150	15.2 %	Stable (-)
Marine fishes nei	3	95792	9.0 %	Stable (-)
European hake	4	39049	3.7 %	Rising
Bogue	5	32677	3.1 %	Stable (+)
Mediterranean horse mackerel	6	32084	3.0 %	Rising
Sardinellas nei	7	31193	2.9 %	Rising
Atlantic bonito	8	25686	2.4 %	Rising
Azov tyulka	9	24445	2.3 %	Declining
Mullets nei	10	23610	2.2 %	Stable (+)
Whiting	11	22599	2.1 %	Rising
Jack and horse mackerels nei	12	22114	2.1 %	Declining
Chub mackerel	13	20307	1.9 %	Rising
European sprat	14	18483	1.7 %	Rising
Picarels	15	17555	1.6 %	Stable (-)
Surmullets(=Red mullets)	16	17357	1.6 %	Stable (+)
Northern bluefin tuna	17	15494	1.5 %	Rising
Bluefish	18	14272	1.3 %	Rising
Blue whiting(=Poutassou)	19	11627	1.1 %	Stable (+)
Swordfish	20	11603	1.1 %	Rising
Atlantic horse mackerel	21	10083	0.9 %	Rising
Common sole	22	9699	0.9 %	Rising
OTHER SPECIES	23	178251	16.6 %	Rising
DIADROMOUS AND MARINE FISH		1069792	100.0 %	Rising

Proportion coming from declining catches.....	4.4 %
from stable catches.....	33.7 %
from rising catches.....	61.9 %

Table 1.2.2

MEDITERRANEAN AND BLACK SEA

Proportions of producers of diadromous and marine fish - 1991 ranking

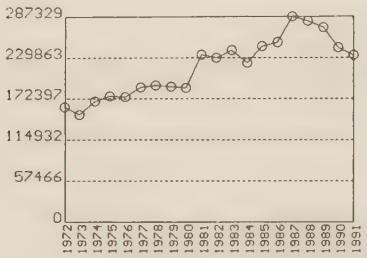
Turkey:27.11%, Italy:19.17%, Spain:10.40%, Greece:10.21%, Algeria:7.14%, Tunisia:7.00%, Former USSR:4.68%, France:3.66%, Egypt:3.24%, Morocco:2.69%, Yugoslav SFR:2.07%, Libya:0.72%, Albania:0.60%, Israel:0.29%, Bulgaria:0.27%, Cyprus:0.22%, Lebanon:0.15%, Syria:0.13%, Romania:0.11%, Malta:0.07%, Gaza Strip:0.05%, Japan:0.01%, Monaco:0.00%, Gibraltar:0.00%.

Table 1.2.3

MEDITERRANEAN AND BLACK SEA
Total production of diadromous and marine fish - Top 22 species
Comparison of ranking order and proportions in 1972, 1982 and 1991

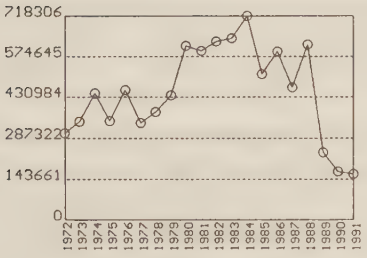
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European pilchard(=Sardine)	1	229583	2 13.4%	161227	2 16.1%
European anchovy	2	629296	1 36.6%	305496	1 30.5%
Marine fishes nei	3	145540	3 8.5%	104670	3 10.5%
European hake	4	30970	9 1.8%	20063	6 2.0%
Bogue	5	22614	11 1.3%	18051	7 1.8%
Mediterranean horse mackerel	6	66598	6 3.9%	16588	9 1.7%
Sardinellas nei	7	17459	13 1.0%	13516	13 1.4%
Atlantic bonito	8	31207	8 1.8%	16225	10 1.6%
Azov tyulka	9	122567	4 7.1%	95731	4 9.6%
Mullets nei	10	16895	14 1.0%	15083	12 1.5%
Whiting	11	6809	24 0.4%	5430	20 0.5%
Jack and horse mackerels nei	12	26596	10 1.6%	46338	5 4.6%
Chub mackerel	13	15636	16 0.9%	2239	40 0.2%
European sprat	14	76526	5 4.5%	6162	17 0.6%
Picarels	15	15009	18 0.9%	17088	8 1.7%
Surmullets(=Red mullets)	16	19003	12 1.1%	15123	11 1.5%
Northern bluefin tuna	17	15694	15 0.9%	5793	19 0.6%
Bluefish	18	32931	7 1.9%	1883	42 0.2%
Blue whiting(=Poutassou)	19	15327	17 0.9%	10041	14 1.0%
Swordfish	20	5847	28 0.3%	5958	18 0.6%
Atlantic horse mackerel	21	12301	19 0.7%	406	71 0.0%
Common sole	22	6638	26 0.4%	4943	23 0.5%
TOTALS		1718047	100.0%	1001672	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



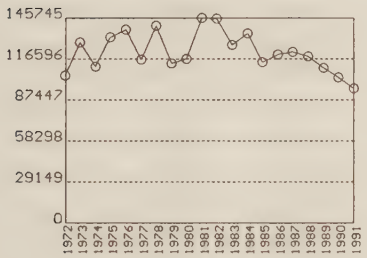
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 9.25 %
Rank..... 1 of 24 based on:1991
Percent to total..... 21.84 % , Cumulative: 21.84 %



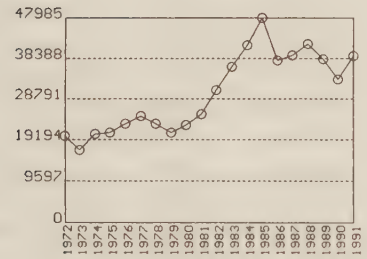
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -0.25 %
Rank..... 2 of 24 based on:1991
Percent to total..... 15.16 % , Cumulative: 37.00 %



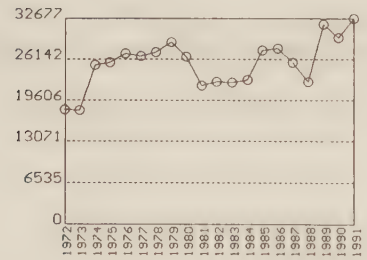
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 19 %
Trend index..... -1.92 %
Rank..... 3 of 24 based on:1991
Percent to total..... 8.95 % , Cumulative: 45.95 %



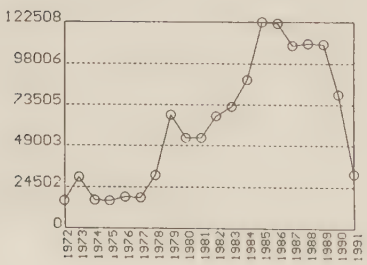
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 14.21 %
Rank..... 4 of 24 based on:1991
Percent to total..... 3.65 % , Cumulative: 49.60 %



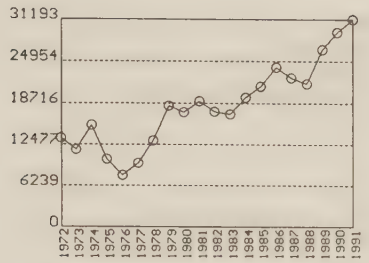
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 4.57 %
Rank..... 5 of 24 based on:1991
Percent to total..... 3.05 % , Cumulative: 52.66 %



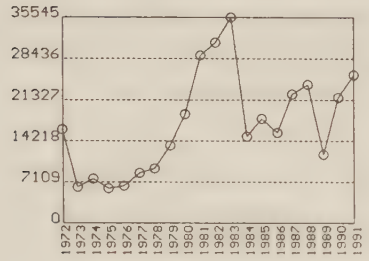
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean horse mackerel
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 24.94 %
Rank..... 6 of 24 based on:1991
Percent to total..... 3.00 % , Cumulative: 55.66 %



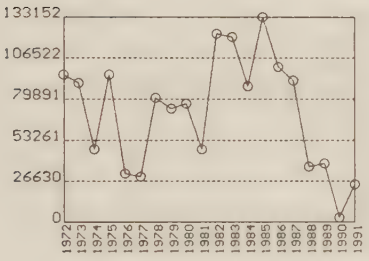
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sardinellas nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 16.94 %
Rank..... 7 of 24 based on:1991
Percent to total..... 2.92 % , Cumulative: 58.57 %



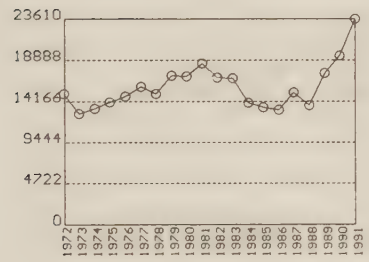
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic bonito
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 15.21 %
Rank..... 8 of 24 based on:1991
Percent to total..... 2.40 % , Cumulative: 60.97 %



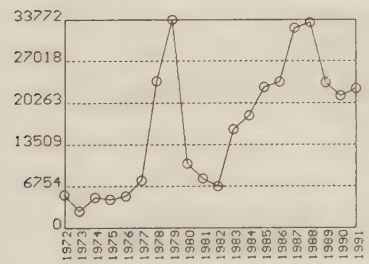
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Azov tyulka
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 18 %
Trend index..... -6.01 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.29 % , Cumulative: 63.26 %



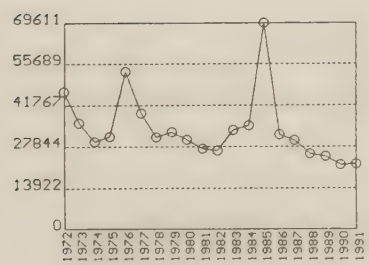
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 4.21 %
Rank..... 10 of 24 based on:1991
Percent to total..... 2.21 % , Cumulative: 65.47 %



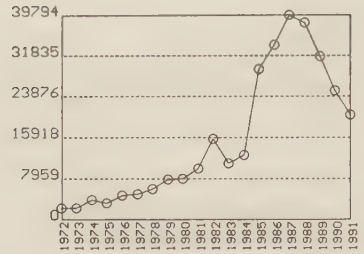
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Whiting
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 24.24 %
Rank..... 11 of 24 based on:1991
Percent to total..... 2.11 % , Cumulative: 67.58 %



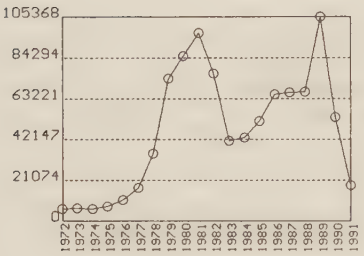
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -6.20 %
Rank..... 12 of 24 based on:1991
Percent to total..... 2.07 % , Cumulative: 69.65 %



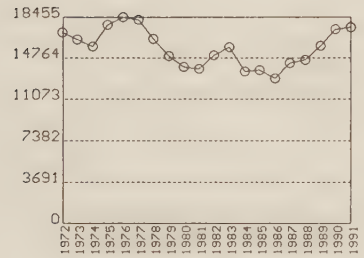
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Chub mackerel
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 37.55 %
Rank..... 13 of 24 based on:1991
Percent to total..... 1.90 % , Cumulative: 71.54 %



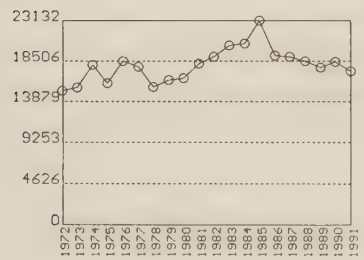
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European sprat
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 21.15 %
Rank..... 14 of 24 based on:1991
Percent to total..... 1.73 % , Cumulative: 73.27 %



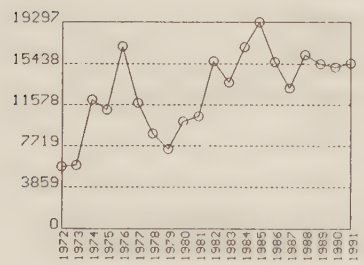
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -1.96 %
Rank..... 15 of 24 based on:1991
Percent to total..... 1.64 % , Cumulative: 74.91 %



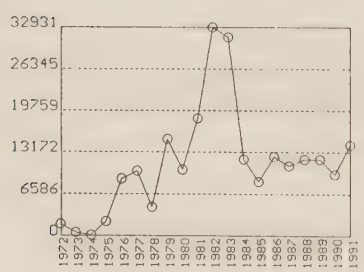
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 2.97 %
Rank..... 16 of 24 based on:1991
Percent to total..... 1.62 % , Cumulative: 76.53 %



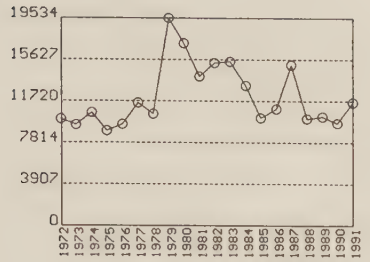
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Northern bluefin tuna
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 10.87 %
Rank..... 17 of 24 based on:1991
Percent to total..... 1.45 % , Cumulative: 77.98 %



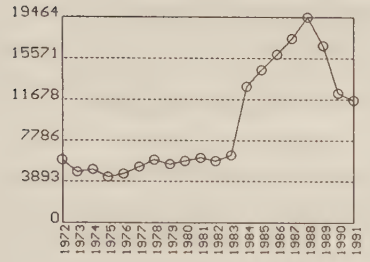
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bluefish
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 17.23 %
Rank..... 18 of 24 based on:1991
Percent to total..... 1.33 % , Cumulative: 79.32 %



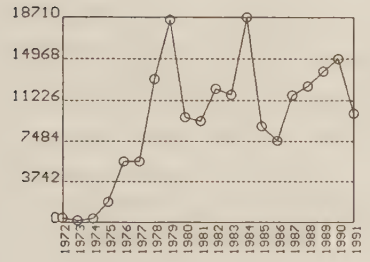
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue whiting(=Poutassou)
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 1.21 %
Rank..... 19 of 24 based on:1991
Percent to total..... 1.09 % , Cumulative: 80.40 %



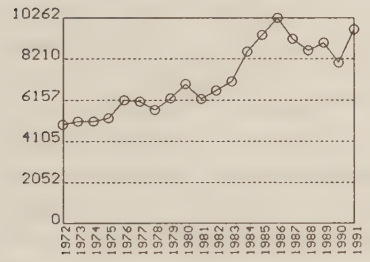
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Swordfish
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 24.04 %
Rank..... 20 of 24 based on:1991
Percent to total..... 1.08 % , Cumulative: 81.49 %



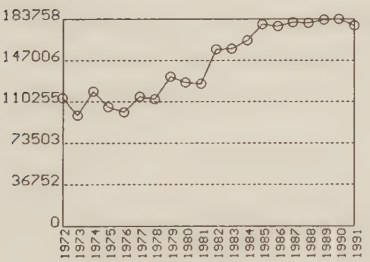
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic horse mackerel
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 21.39 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.94 % , Cumulative: 82.43 %



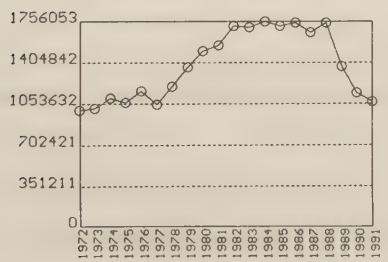
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 11.61 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.91 % , Cumulative: 83.34 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER SPECIES
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 11.16 %
Rank..... 23 of 24 based on:1991
Percent to total..... 16.64 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE FISH
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 5.94 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

1.3 Crustaceans

Table 1.3.1

MEDITERRANEAN AND BLACK SEA
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	25363	48.1 %	Rising
Norway lobster	2	8181	15.5 %	Rising
Marine crustaceans nei	3	7373	14.0 %	Stable (+)
Mantis squillid	4	4318	8.2 %	Stable (-)
Deepwater rose shrimp	5	2070	3.9 %	Rising
Caramote prawn	6	1453	2.8 %	Rising
Blue and red shrimp	7	1430	2.7 %	Rising
Marine crabs nei	8	772	1.5 %	Rising
Mediterranean shore crab	9	687	1.3 %	Rising
Common shrimp	10	309	0.6 %	Declining
Palinurid spiny lobsters nei	11	305	0.6 %	Stable (+)
European lobster	12	250	0.5 %	Rising
Common spiny lobster	13	152	0.3 %	Rising
Spinous spider crab	14	33	0.1 %	Declining
Pink spiny lobster	15	2	0.0 %	Declining
Common prawn	16	1	0.0 %	Declining
Scarlet shrimp	17	0	0.0 %	Sharp decl
Lesser slipper lobster	18	0	0.0 %	Declining
Edible crab	19	0	0.0 %	Declining
TOTAL - CRUSTACEANS		52699	100.0 %	Rising

Proportion coming from declining catches.....	0.7 %
from stable catches.....	22.8 %
from rising catches.....	76.6 %

Table 1.3.2

MEDITERRANEAN AND BLACK SEA
Proportions of producers of crustaceans - 1991 ranking

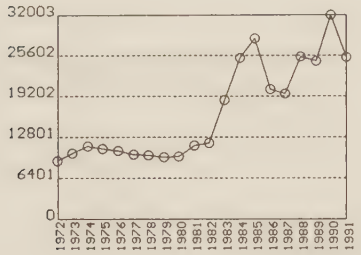
Italy:61.05%, Spain:9.45%, Egypt:9.04%, Greece:5.90%, Algeria:4.92%, Tunisia:4.34%, Turkey:3.38%, Yugoslav SFR:0.67%, Morocco:0.43%, Israel:0.37%, France:0.27%, Syria:0.13%, Lebanon:0.05%, Malta:0.01%.

Table 1.3.3

MEDITERRANEAN AND BLACK SEA
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

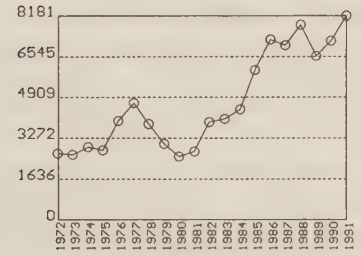
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	11948	1 38.4%	9091	1 36.4%
Norway lobster	2	3919	3 12.6%	2672	4 10.7%
Marine crustaceans nei	3	2224	4 7.2%	3714	3 14.9%
Mantis squillid	4	4010	2 12.9%	5042	2 20.2%
Deepwater rose shrimp	5	1735	7 5.6%	802	5 3.2%
Caramote prawn	6	2104	5 6.8%	772	6 3.1%
Blue and red shrimp	7	2010	6 6.5%	747	7 3.0%
Marine crabs nei	8	1059	8 3.4%	429	10 1.7%
Mediterranean shore crab	9	834	9 2.7%	0	17 0.0%
Common shrimp	10	300	11 1.0%	87	13 0.4%
Palinurid spiny lobsters nei	11	604	10 1.9%	734	8 2.9%
European lobster	12	144	12 0.5%	8	15 0.0%
Common spiny lobster	13	130	13 0.4%	128	11 0.5%
Spinous spider crab	14	52	14 0.2%	121	12 0.5%
Pink spiny lobster	15	2	16 0.0%	23	14 0.1%
Common prawn	16	1	17 0.0%	2	16 0.0%
Scarlet shrimp	17	0	18 0.0%	600	9 2.4%
Lesser slipper lobster	18	0	19 0.0%	0	18 0.0%
Edible crab	19	19	15 0.1%	0	19 0.0%
TOTALS		31095	100.0%	24972	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



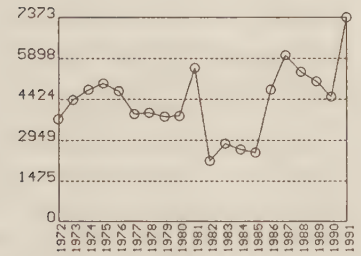
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 21.15 %
Rank..... 1 of 12 based on:1991
Percent to total..... 48.13 % , Cumulative: 48.13 %



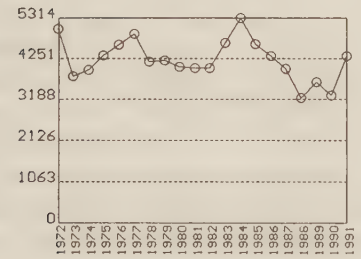
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 19.59 %
Rank..... 2 of 12 based on:1991
Percent to total..... 15.52 % , Cumulative: 63.65 %



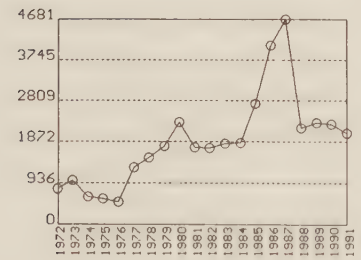
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 4.44 %
Rank..... 3 of 12 based on:1991
Percent to total..... 13.99 % , Cumulative: 77.64 %



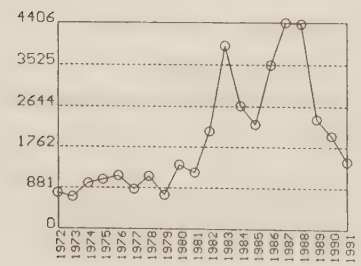
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... -2.42 %
Rank..... 4 of 12 based on:1991
Percent to total..... 8.19 % , Cumulative: 85.84 %



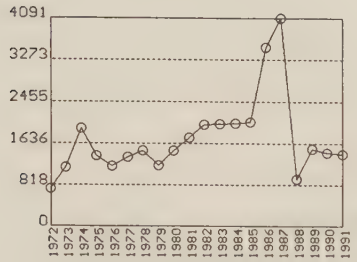
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Deepwater rose shrimp
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 21.38 %
Rank..... 5 of 12 based on:1991
Percent to total..... 3.93 % , Cumulative: 89.76 %



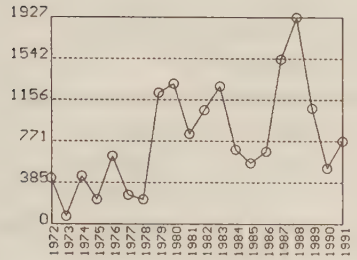
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 22.59 %
Rank..... 6 of 12 based on:1991
Percent to total..... 2.76 % , Cumulative: 92.52 %



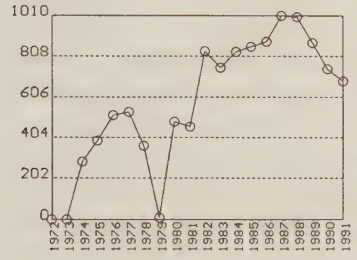
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue and red shrimp
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 9.17 %
Rank..... 7 of 12 based on:1991
Percent to total..... 2.71 % , Cumulative: 95.24 %



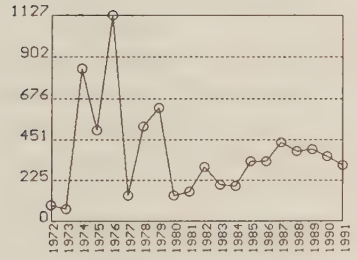
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crabs nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 17.85 %
Rank..... 8 of 12 based on:1991
Percent to total..... 1.46 % , Cumulative: 96.70 %



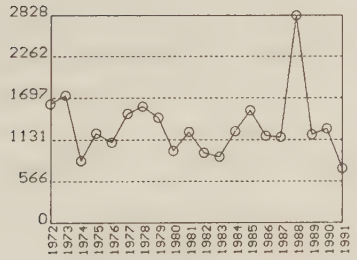
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean shore crab
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 24.78 %
Rank..... 9 of 12 based on:1991
Percent to total..... 1.30 % , Cumulative: 98.00 %



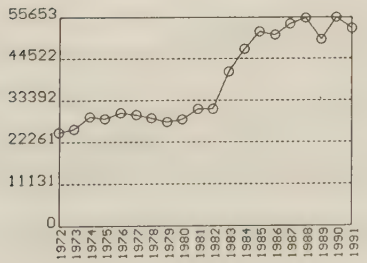
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common shrimp
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 20 %
Trend index..... -5.11 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.59 % , Cumulative: 98.59 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER CRUSTACEANS
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... -0.31 %
Rank..... 11 of 12 based on:1991
Percent to total..... 1.40 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 15.06 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

1.4 Molluscs

Table 1.4.1

MEDITERRANEAN AND BLACK SEA
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	126568	45.1 %	Rising
Striped venus	2	40379	14.4 %	Rising
Common cuttlefish	3	18689	6.7 %	Rising
Carpet shells nei	4	16000	5.7 %	Sharp rise
Marine molluscs nei	5	14964	5.3 %	Rising
Common octopus	6	13108	4.7 %	Rising
Octopuses	7	12605	4.5 %	Rising
Portuguese cupped oyster	8	10014	3.6 %	Rising
Common squids	9	7801	2.8 %	Rising
European flying squid	10	7700	2.7 %	Rising
European flat oyster	11	4385	1.6 %	Rising
Horned and musky octopuses	12	3366	1.2 %	Stable (+)
Cuttlefishes, bobtail squids	13	2523	0.9 %	Stable (+)
Clams nei	14	1087	0.4 %	Rising
Squids nei	15	562	0.2 %	Stable (+)
Cephalopods nei	16	393	0.1 %	Declining
Grooved carpet shell	17	159	0.1 %	Rising
Donax clams	18	110	0.0 %	Rising
Carpet shell	19	100	0.0 %	Declining
Murex	20	96	0.0 %	Stable (-)
Sea mussels nei	21	0	0.0 %	Sharp decl
Common cockle	22	0	0.0 %	Sharp decl
Razor clams	23	0	0.0 %	Rising
Periwinkle	24	0	0.0 %	Stable (-)
Great scallop	25	0	0.0 %	Declining
Gastropods nei	26	0	0.0 %	Sharp rise
TOTAL MOLLUSCS		280609	100.0 %	Rising

Proportion coming from declining catches.....	0.2 %
from stable catches.....	2.3 %
from rising catches.....	97.5 %

Table 1.4.2

MEDITERRANEAN AND BLACK SEA
Proportions of producers of molluscs - 1991 ranking

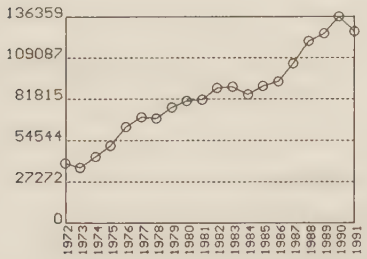
Italy:67.14%, France:10.23%, Turkey:9.12%, Tunisia:4.83%, Spain:3.74%, Greece:3.09%, Former USSR:0.63%, Yugoslav SFR:0.42%, Algeria:0.25%, Egypt:0.23%, Morocco:0.11%, Cyprus:0.10%, Albania:0.07%, Israel:0.03%, Lebanon:0.01%.

Table 1.4.3

MEDITERRANEAN AND BLACK SEA
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

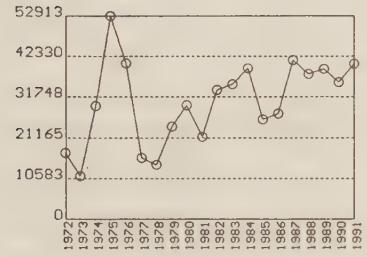
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mediterranean mussel	1	89263	1 44.6%	39717	1 35.8%
Striped venus	2	33546	2 16.8%	17455	2 15.7%
Common cuttlefish	3	16106	4 8.0%	15458	3 13.9%
Carpet shells nei	4	0	23 0.0%	0	22 0.0%
Marine molluscs nei	5	17108	3 8.5%	1148	11 1.0%
Common octopus	6	10590	5 5.3%	9571	4 8.6%
Octopuses	7	9063	6 4.5%	6068	6 5.5%
Portuguese cupped oyster	8	3481	9 1.7%	895	13 0.8%
Common squids	9	5497	8 2.7%	7926	5 7.1%
European flying squid	10	3115	10 1.6%	2364	9 2.1%
European flat oyster	11	6543	7 3.3%	236	16 0.2%
Horned and musky octopuses	12	2586	11 1.3%	3459	7 3.1%
Cuttlefishes, bobtail squids	13	2166	12 1.1%	3004	8 2.7%
Clams nei	14	110	17 0.1%	150	17 0.1%
Squids nei	15	275	14 0.1%	282	15 0.3%
Cephalopods nei	16	0	24 0.0%	1751	10 1.6%
Grooved carpet shell	17	44	19 0.0%	0	20 0.0%
Donax clams	18	0	21 0.0%	0	26 0.0%
Carpet shell	19	241	15 0.1%	600	14 0.5%
Murex	20	110	18 0.1%	50	18 0.1%
Sea mussels nei	21	0	26 0.0%	0	25 0.0%
Common cockle	22	139	16 0.1%	900	12 0.8%
Razor clams	23	0	22 0.0%	0	21 0.0%
Periwinkle	24	292	13 0.2%	0	23 0.0%
Great scallop	25	34	20 0.0%	7	19 0.0%
Gastropods nei	26	0	25 0.0%	0	24 0.0%
TOTALS		200309	100.0%	111041	100.0%

Line plots for the top ten molluscs species and for the entire period 1972 - 1991 are given below.



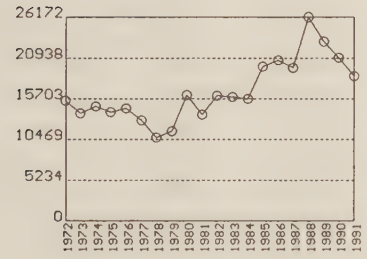
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 18.08 %
Rank..... 1 of 12 based on:1991
Percent to total..... 45.10 % , Cumulative: 45.10 %



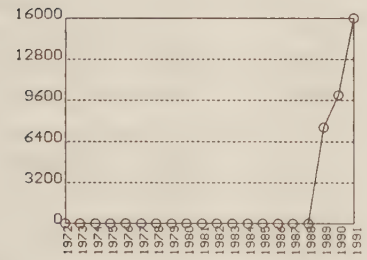
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 8.51 %
Rank..... 2 of 12 based on:1991
Percent to total..... 14.39 % , Cumulative: 59.49 %



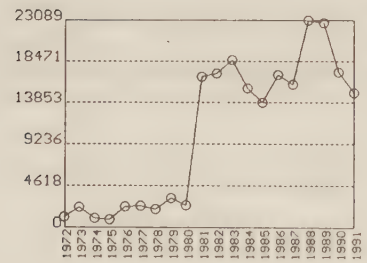
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 9.70 %
Rank..... 3 of 12 based on:1991
Percent to total..... 6.66 % , Cumulative: 66.15 %



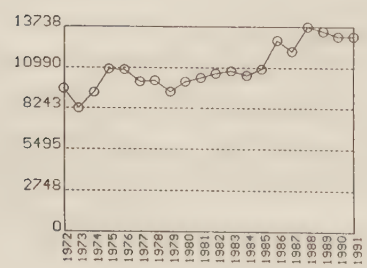
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Carpet shells nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation.....
Trend index..... 83.37 %
Rank..... 4 of 12 based on:1991
Percent to total..... 5.70 % , Cumulative: 71.86 %



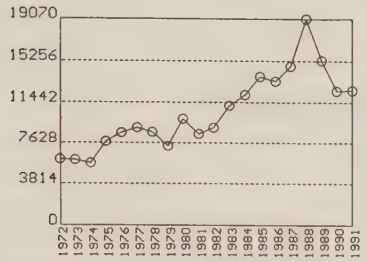
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 36.32 %
Rank..... 5 of 12 based on:1991
Percent to total..... 5.33 % , Cumulative: 77.19 %



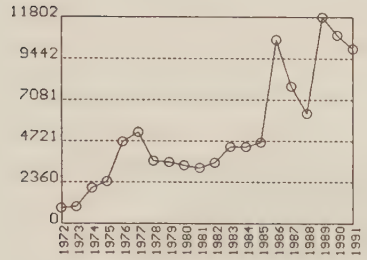
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 6.51 %
Rank..... 6 of 12 based on:1991
Percent to total..... 4.67 % , Cumulative: 81.86 %



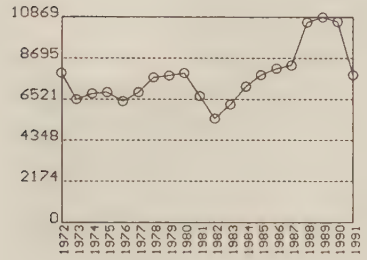
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 15.72 %
Rank..... 7 of 12 based on:1991
Percent to total..... 4.49 % , Cumulative: 86.35 %



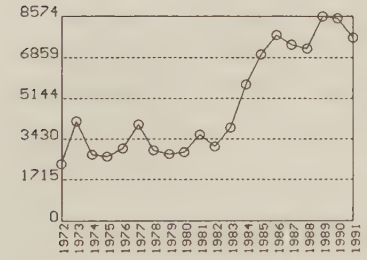
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Portuguese cupped oyster
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 29.03 %
Rank..... 8 of 12 based on:1991
Percent to total..... 3.57 % , Cumulative: 89.92 %



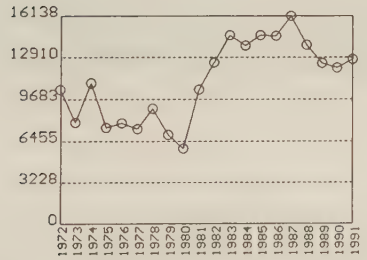
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 6.16 %
Rank..... 9 of 12 based on:1991
Percent to total..... 2.78 % , Cumulative: 92.70 %



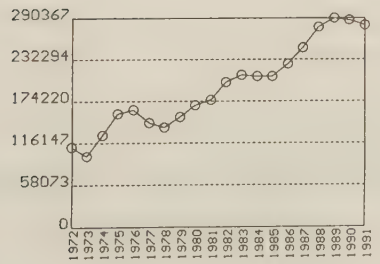
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flying squid
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 21.75 %
Rank..... 10 of 12 based on:1991
Percent to total..... 2.74 % , Cumulative: 95.45 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER MOLLUSCS
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 10.27 %
Rank..... 11 of 12 based on:1991
Percent to total..... 4.56 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....MEDITERRANEAN AND BLACK SEA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 16.08 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

2. MEDITERRANEAN AND BLACK SEA

37.1: Western Sub-Area

Division 37.1.1 - Balearic

PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Spain:49.54%, Algeria:37.09%, Morocco:13.37%.

2.1 Diadromous fish and marine fish.

Table 2.1.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European pilchard(=Sardine)	1	109250	57.0 %	Rising
European anchovy	2	20912	10.9 %	Stable (-)
Marine fishes nei	3	14968	7.8 %	Stable (-)
Jack and horse mackerels nei	4	9747	5.1 %	Stable (-)
Bogue	5	7547	3.9 %	Rising
European hake	6	4509	2.4 %	Rising
Sardinellas nei	7	3916	2.0 %	Rising
Blue whiting(=Poutassou)	8	3601	1.9 %	Stable (-)
Surmullets(=Red mullets)	9	3548	1.9 %	Stable (+)
Demersal percomorphs nei	10	3064	1.6 %	Declining
Clupeoids nei	11	2737	1.4 %	Sharp rise
Angler(=Monk)	12	1228	0.6 %	Rising
Red(=Blackspot)seabream	13	1104	0.6 %	Declining
Common sole	14	912	0.5 %	Stable (+)
Porgies, seabreams, nei	15	843	0.4 %	Declining
Gadiformes nei	16	831	0.4 %	Sharp rise
Sharks, rays, skates, etc	17	748	0.4 %	Rising
Barracudas	18	423	0.2 %	Sharp rise
Greater forkbeard	19	389	0.2 %	Stable (+)
European conger	20	355	0.2 %	Rising
Atlantic mackerel	21	299	0.2 %	Declining
Chub mackerel	22	171	0.1 %	Rising
OTHER SPECIES	23	611	0.3 %	Declining
DIADROMOUS AND MARINE		191713	100.0 %	Rising

Proportion coming from declining catches.....	3.1 %
from stable catches.....	28.2 %
from rising catches.....	68.7 %

Table 2.1.2

MEDITERRANEAN AND BLACK SEA - 37.1.1: Balearic
Proportions of producers of diadromous and marine fish - 1991 ranking

Spain:46.84%, Algeria:38.82%, Morocco:14.34%.

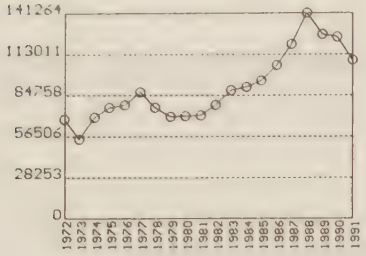
Table 2.1.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Production of diadromous fish and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

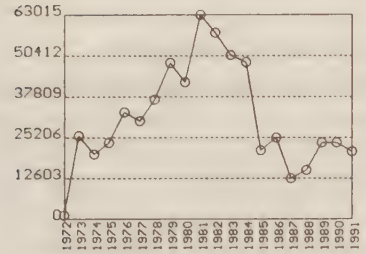
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European pilchard(=Sardine)	1	78397	1 33.4%	68403	1 56.8%
European anchovy	2	57477	2 24.5%	1151	14 1.0%
Marine fishes nei	3	30307	3 12.9%	2078	10 1.7%
Jack and horse mackerels nei	4	13765	4 5.9%	10545	2 8.8%
Bogue	5	6018	8 2.6%	0	36 0.0%
European hake	6	8656	6 3.7%	5355	5 4.5%
Sardinellas nei	7	2509	11 1.1%	1312	13 1.1%
Blue whiting(=Poutassou)	8	10740	5 4.6%	6000	3 5.0%
Surmullets(=Red mullets)	9	4621	9 2.0%	3330	8 2.8%
Demersal percomorphs nei	10	0	52 0.0%	5700	4 4.7%
Clupeoids nei	11	0	48 0.0%	0	47 0.0%
Angler(=Monk)	12	1741	12 0.7%	900	15 0.8%
Red(=Blackspot)seabream	13	1657	13 0.7%	2400	9 2.0%
Common sole	14	1238	15 0.5%	739	17 0.6%
Porgies, seabreams, nei	15	719	16 0.3%	1700	11 1.4%
Gadiformes nei	16	0	50 0.0%	0	49 0.0%
Sharks, rays, skates, etc	17	1246	14 0.5%	106	22 0.1%
Barracudas	18	0	51 0.0%	0	50 0.0%
Greater forkbeard	19	531	19 0.2%	0	33 0.0%
European conger	20	538	18 0.2%	200	19 0.2%
Atlantic mackerel	21	3729	10 1.6%	3503	7 2.9%
Chub mackerel	22	16	37 0.0%	142	20 0.1%
TOTALS		234491	100.0%	120397	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



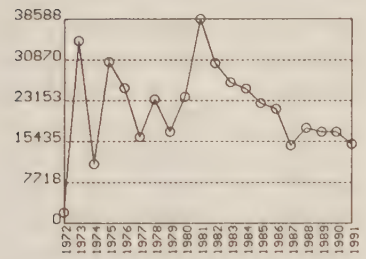
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 12.12 %
Rank..... 1 of 24 based on:1991
Percent to total..... 56.99 % , Cumulative: 56.99 %



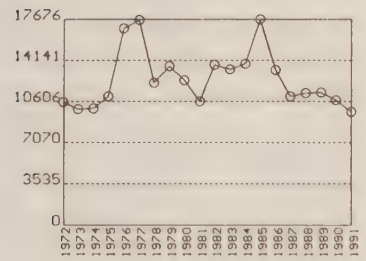
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... -0.58 %
Rank..... 2 of 24 based on:1991
Percent to total..... 10.91 % , Cumulative: 67.89 %



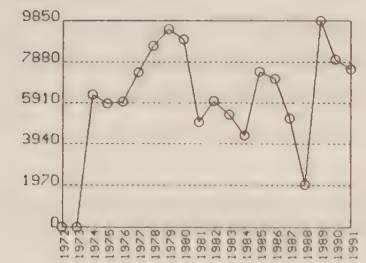
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 15 %
Trend index..... -1.74 %
Rank..... 3 of 24 based on:1991
Percent to total..... 7.81 % , Cumulative: 75.70 %



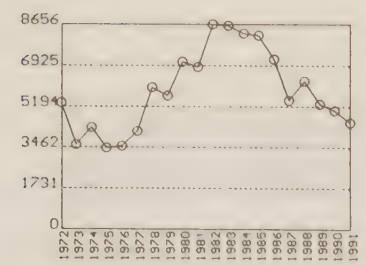
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -0.67 %
Rank..... 4 of 24 based on:1991
Percent to total..... 5.08 % , Cumulative: 80.79 %



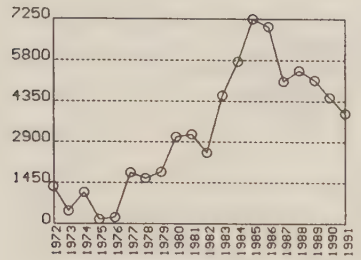
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 8.95 %
Rank..... 5 of 24 based on:1991
Percent to total..... 3.94 % , Cumulative: 84.72 %



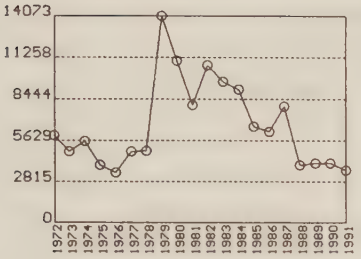
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 5.84 %
Rank..... 6 of 24 based on:1991
Percent to total..... 2.35 % , Cumulative: 87.07 %



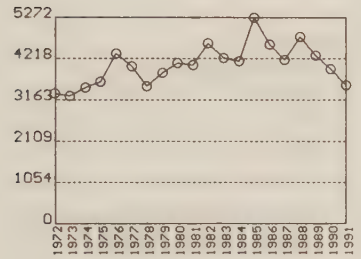
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sardinellas nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 29.54 %
Rank..... 7 of 24 based on:1991
Percent to total..... 2.04 % , Cumulative: 89.12 %



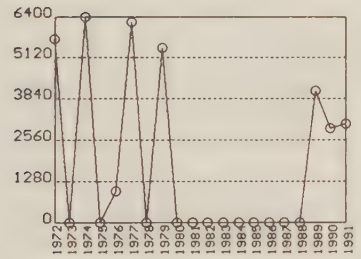
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue whiting(=Poutassou)
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... -1.21 %
Rank..... 8 of 24 based on:1991
Percent to total..... 1.88 % , Cumulative: 91.00 %



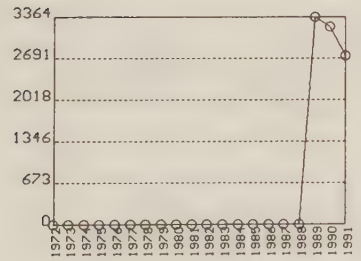
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 3.60 %
Rank..... 9 of 24 based on:1991
Percent to total..... 1.85 % , Cumulative: 92.85 %



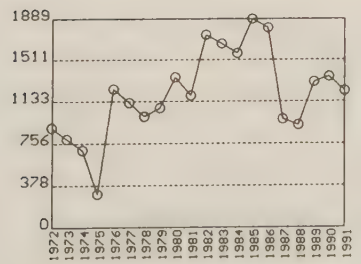
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Demersal percomorphs nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 32 %
Trend index.....-17.66 %
Rank..... 10 of 24 based on:1991
Percent to total..... 1.60 % , Cumulative: 94.44 %



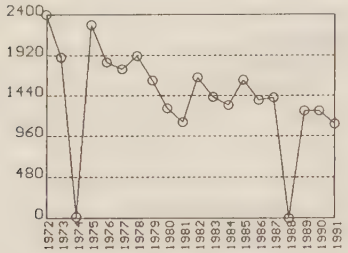
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Clupeoids nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 80.31 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.43 % , Cumulative: 95.87 %



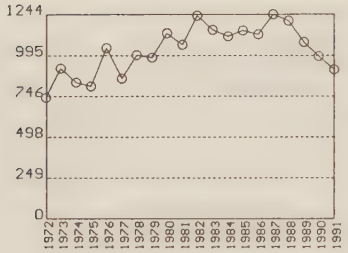
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Angler(=Monk)
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 9.14 %
Rank..... 12 of 24 based on:1991
Percent to total..... 0.64 % , Cumulative: 96.51 %



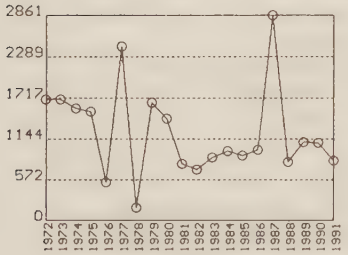
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red(=Blackspot)seabream
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... -9.46 %
Rank..... 13 of 24 based on:1991
Percent to total..... 0.58 % , Cumulative: 97.09 %



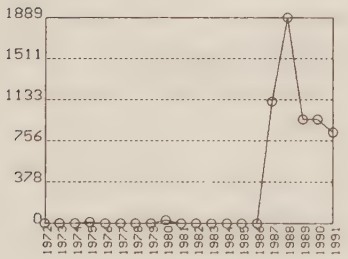
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 15 %
Trend index..... 4.59 %
Rank..... 14 of 24 based on:1991
Percent to total..... 0.48 % , Cumulative: 97.56 %



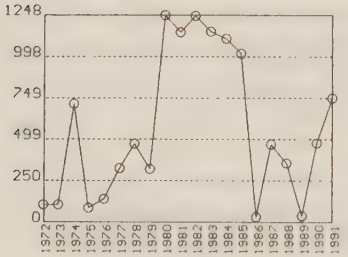
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Porgies, seabreams, nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 20 %
Trend index..... -5.81 %
Rank..... 15 of 24 based on:1991
Percent to total..... 0.44 % , Cumulative: 98.00 %



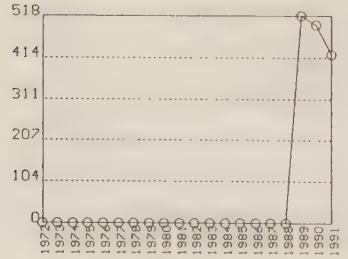
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gadiformes nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 68.26 %
Rank..... 16 of 24 based on:1991
Percent to total..... 0.43 % , Cumulative: 98.44 %



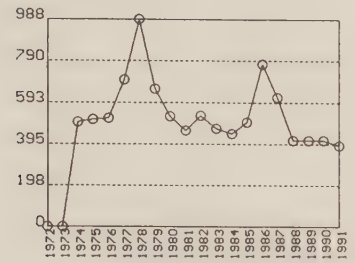
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sharks, rays, skates, etc
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... 8.59 %
Rank..... 17 of 24 based on:1991
Percent to total..... 0.39 % , Cumulative: 98.83 %



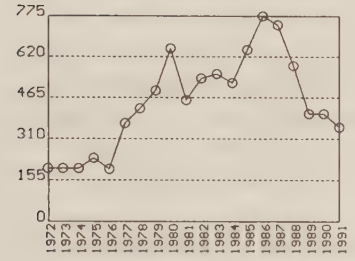
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Barracudas
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 80.32 %
Rank..... 18 of 24 based on:1991
Percent to total..... 0.22 % , Cumulative: 99.05 %



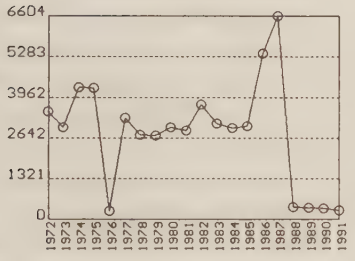
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Greater forkbeard
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 4.38 %
Rank..... 19 of 24 based on:1991
Percent to total..... 0.20 % , Cumulative: 99.25 %



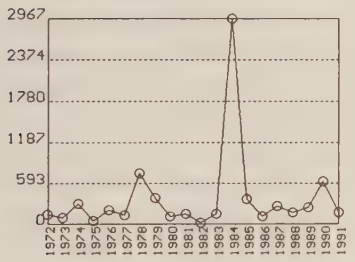
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European conger
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 13.39 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.19 % , Cumulative: 99.44 %



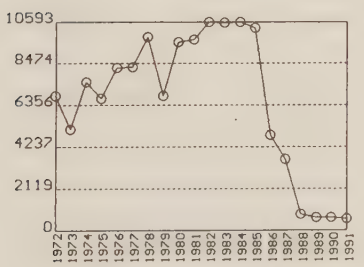
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic mackerel
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index.....-10.34 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.16 % , Cumulative: 99.59 %



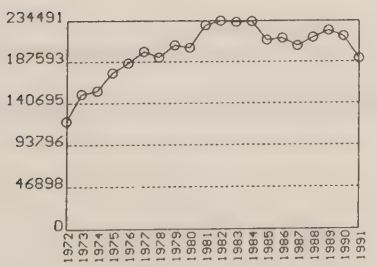
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Chub mackerel
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 13.54 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.09 % , Cumulative: 99.68 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER SPECIES
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index.....-15.50 %
Rank..... 23 of 24 based on:1991
Percent to total..... 0.33 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 5.67 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

2.2 Crustaceans

Table 2.2.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine crustaceans nei	1	2027	27.7 %	Rising
Deepwater rose shrimp	2	1905	26.0 %	Rising
Blue and red shrimp	3	1430	19.5 %	Rising
Norway lobster	4	701	9.6 %	Rising
Mediterranean shore crab	5	566	7.7 %	Rising
Common shrimp	6	300	4.1 %	Stable (-)
Natantian decapods nei	7	190	2.6 %	Sharp rise
Caramote prawn	8	115	1.6 %	Sharp rise
Common spiny lobster	9	75	1.0 %	Rising
Palinurid spiny lobsters nei	10	13	0.2 %	Rising
Spinous spider crab	11	0	0.0 %	Sharp decl
Scarlet shrimp	12	0	0.0 %	Sharp decl
Marine crabs nei	13	0	0.0 %	Sharp rise
European lobster	14	0	0.0 %	Sharp decl
Edible crab	15	0	0.0 %	Declining
TOTAL CRUSTACEANS		7322	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	4.1 %
from rising catches.....	95.9 %

Table 2.2.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Proportions of producers of crustaceans - 1991 ranking

Spain:61.54%, Algeria:35.40%, Morocco:3.06%.

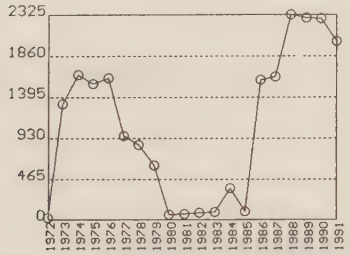
Table 2.2.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

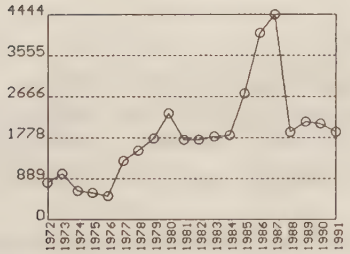
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Marine crustaceans nei	1	83	6 1.5%	24	6 0.9%
Deepwater rose shrimp	2	1735	2 31.5%	802	1 28.6%
Blue and red shrimp	3	2010	1 36.5%	747	2 26.6%
Norway lobster	4	470	4 8.5%	526	4 18.8%
Mediterranean shore crab	5	787	3 14.3%	0	8 0.0%
Common shrimp	6	252	5 4.6%	0	13 0.0%
Natantian decapods nei	7	25	9 0.5%	0	9 0.0%
Caramote prawn	8	0	15 0.0%	0	14 0.0%
Common spiny lobster	9	41	8 0.8%	100	5 3.6%
Palinurid spiny lobsters nei	10	80	7 1.5%	6	7 0.2%
Spinous spider crab	11	0	11 0.0%	0	10 0.0%
Scarlet shrimp	12	0	14 0.0%	600	3 21.4%
Marine crabs nei	13	0	12 0.0%	0	11 0.0%
European lobster	14	0	13 0.0%	0	12 0.0%
Edible crab	15	19	10 0.4%	0	15 0.0%
TOTALS		5502	100.0%	2805	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



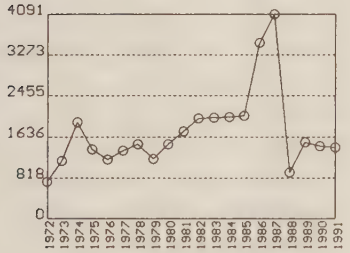
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 16.26 %
Rank..... 1 of 12 based on:1991
Percent to total..... 27.68 % , Cumulative: 27.68 %



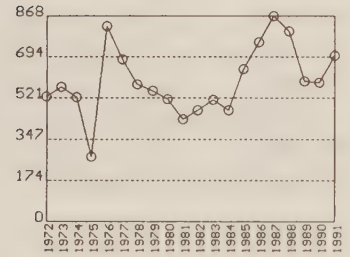
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Deepwater rose shrimp
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 20.01 %
Rank..... 2 of 12 based on:1991
Percent to total..... 26.02 % , Cumulative: 53.70 %



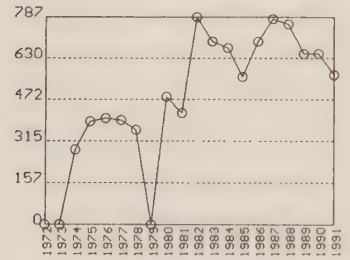
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue and red shrimp
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 9.17 %
Rank..... 3 of 12 based on:1991
Percent to total..... 19.53 % , Cumulative: 73.23 %



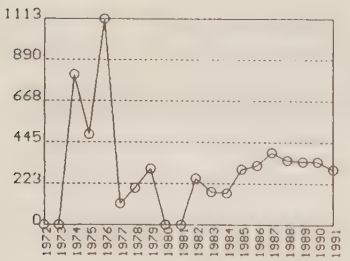
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 5.12 %
Rank..... 4 of 12 based on:1991
Percent to total..... 9.57 % , Cumulative: 82.81 %



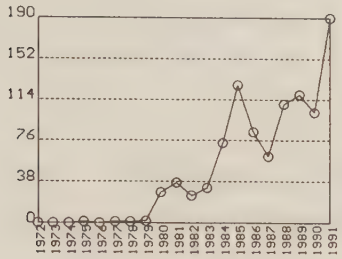
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean shore crab
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 22.32 %
Rank..... 5 of 12 based on:1991
Percent to total..... 7.73 % , Cumulative: 90.54 %



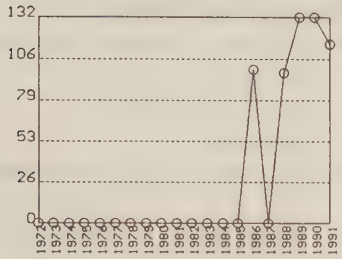
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common shrimp
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... -2.07 %
Rank..... 6 of 12 based on:1991
Percent to total..... 4.10 % , Cumulative: 94.63 %



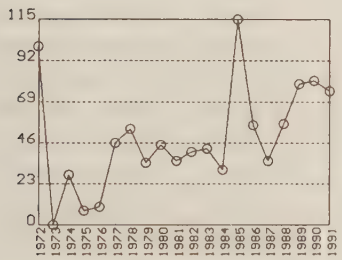
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 53.66 %
Rank..... 7 of 12 based on:1991
Percent to total..... 2.59 % , Cumulative: 97.23 %



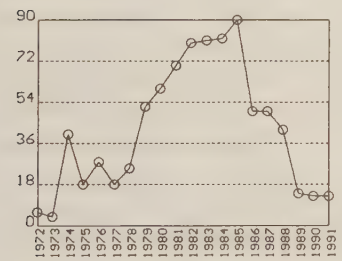
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 70.90 %
Rank..... 8 of 12 based on:1991
Percent to total..... 1.57 % , Cumulative: 98.80 %



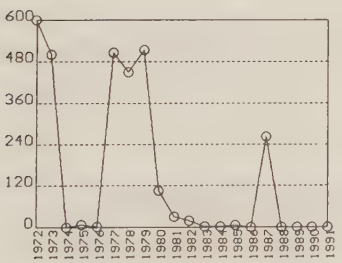
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common spiny lobster
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 15.06 %
Rank..... 9 of 12 based on:1991
Percent to total..... 1.02 % , Cumulative: 99.82 %



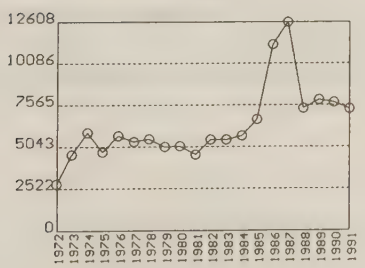
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 8.07 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.18 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER CRUSTACEANS
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index.....-43.80 %
Rank.....
.....



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 13.00 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

2.3 Molluscs

Table 2.3.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Octopuses	1	5679	54.1 %	Rising
Cuttlefishes, bobtail squids	2	1211	11.5 %	Declining
Clams nei	3	1047	10.0 %	Sharp rise
Striped venus	4	783	7.5 %	Rising
Common squids	5	678	6.5 %	Declining
Common cuttlefish	6	394	3.8 %	Sharp rise
Cephalopods nei	7	304	2.9 %	Sharp rise
European flying squid	8	282	2.7 %	Sharp rise
Mediterranean mussel	9	65	0.6 %	Declining
Squids nei	10	37	0.4 %	Declining
European flat oyster	11	15	0.1 %	Declining
Marine molluscs nei	12	7	0.1 %	Declining
Portuguese cupped oyster	13	0	0.0 %	Rising
Common cockle	14	0	0.0 %	Sharp decl
Razor clams	15	0	0.0 %	Rising
Periwinkle	16	0	0.0 %	Stable (-)
Great scallop	17	0	0.0 %	Declining
Carpet shell	18	0	0.0 %	Sharp decl
Grooved carpet shell	19	0	0.0 %	Declining
Gastropods nei	20	0	0.0 %	Sharp rise
TOTAL MOLLUSCS		10502	100.0 %	Stable (-)

Proportion coming from declining catches.....	19.2 %
from stable catches.....	0.0 %
from rising catches.....	80.8 %

Table 2.3.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Proportions of producers of molluscs - 1991 ranking

Spain:90.38%, Algeria:6.74%, Morocco:2.88%.

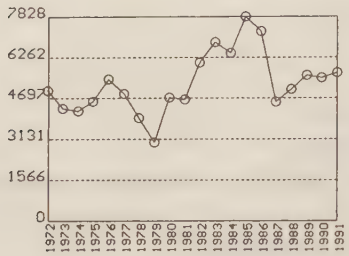
Table 2.3.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.1: Balearic
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

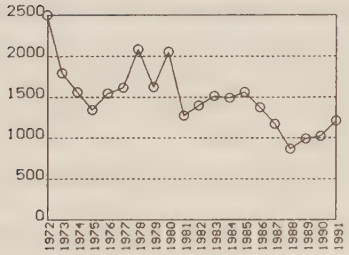
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Octopuses	1	6082	1 48.8%	5000	1 43.5%
Cuttlefishes, bobtail squids	2	1397	3 11.2%	2500	2 21.7%
Clams nei	3	0	18 0.0%	0	17 0.0%
Striped venus	4	264	6 2.1%	600	6 5.2%
Common squids	5	1125	4 9.0%	1200	3 10.4%
Common cuttlefish	6	0	15 0.0%	0	14 0.0%
Cephalopods nei	7	0	13 0.0%	0	12 0.0%
European flying squid	8	0	11 0.0%	0	20 0.0%
Mediterranean mussel	9	0	10 0.0%	0	10 0.0%
Squids nei	10	0	17 0.0%	0	16 0.0%
European flat oyster	11	0	20 0.0%	0	19 0.0%
Marine molluscs nei	12	3125	2 25.1%	700	5 6.1%
Portuguese cupped oyster	13	0	12 0.0%	0	11 0.0%
Common cockle	14	139	7 1.1%	900	4 7.8%
Razor clams	15	0	14 0.0%	0	13 0.0%
Periwinkle	16	292	5 2.3%	0	8 0.0%
Great scallop	17	0	16 0.0%	0	15 0.0%
Carpet shell	18	9	9 0.1%	600	7 5.2%
Grooved carpet shell	19	44	8 0.4%	0	9 0.0%
Gastropods nei	20	0	19 0.0%	0	18 0.0%
TOTALS		12477	100.0%	11500	100.0%

Line plots for the top ten molluscs species and for the entire period 1972 - 1991 are given below.



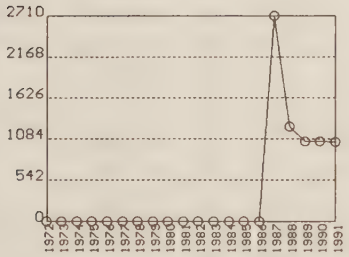
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 5.58 %
Rank..... 1 of 12 based on:1991
Percent to total..... 54.08 % , Cumulative: 54.08 %



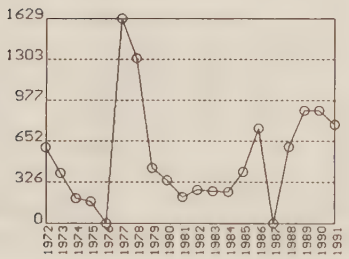
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cuttlefishes, bobtail squids
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index.....-10.23 %
Rank..... 2 of 12 based on:1991
Percent to total..... 11.53 % , Cumulative: 65.61 %



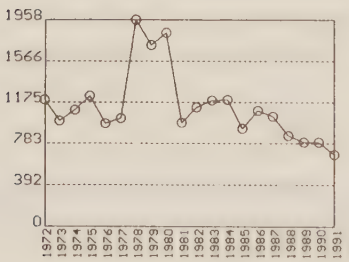
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Clams nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 66.71 %
Rank..... 3 of 12 based on:1991
Percent to total..... 9.97 % , Cumulative: 75.58 %



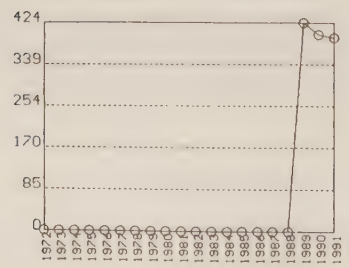
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 5.73 %
Rank..... 4 of 12 based on:1991
Percent to total..... 7.46 % , Cumulative: 83.03 %



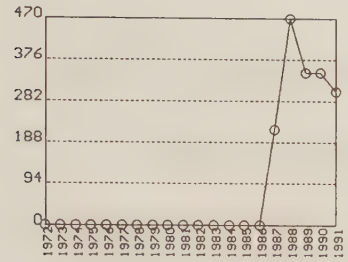
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... -6.91 %
Rank..... 5 of 12 based on:1991
Percent to total..... 6.46 % , Cumulative: 89.49 %



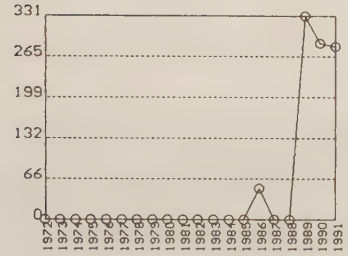
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 80.72 %
Rank..... 6 of 12 based on:1991
Percent to total..... 3.75 % , Cumulative: 93.24 %



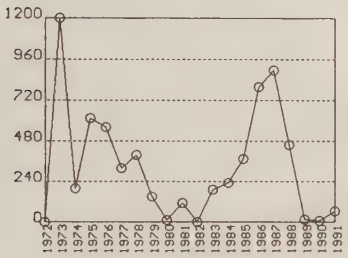
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cephalopods nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 71.71 %
Rank..... 7 of 12 based on:1991
Percent to total..... 2.89 % , Cumulative: 96.13 %



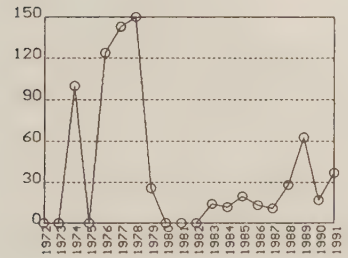
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flying squid
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 78.42 %
Rank..... 8 of 12 based on:1991
Percent to total..... 2.69 % , Cumulative: 98.82 %



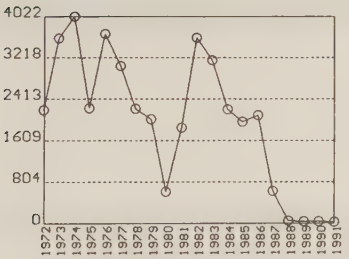
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index.....-10.90 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.62 % , Cumulative: 99.44 %



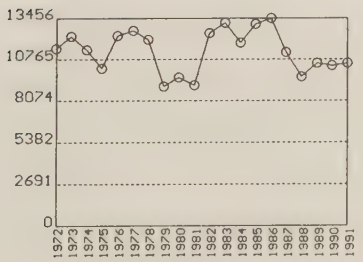
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Squids nei
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index.....-16.02 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.35 % , Cumulative: 99.79 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER MOLLUSCS
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index.....-27.04 %
Rank..... 11 of 12 based on:1991
Percent to total..... 0.21 % , Cumulative:100.00 %



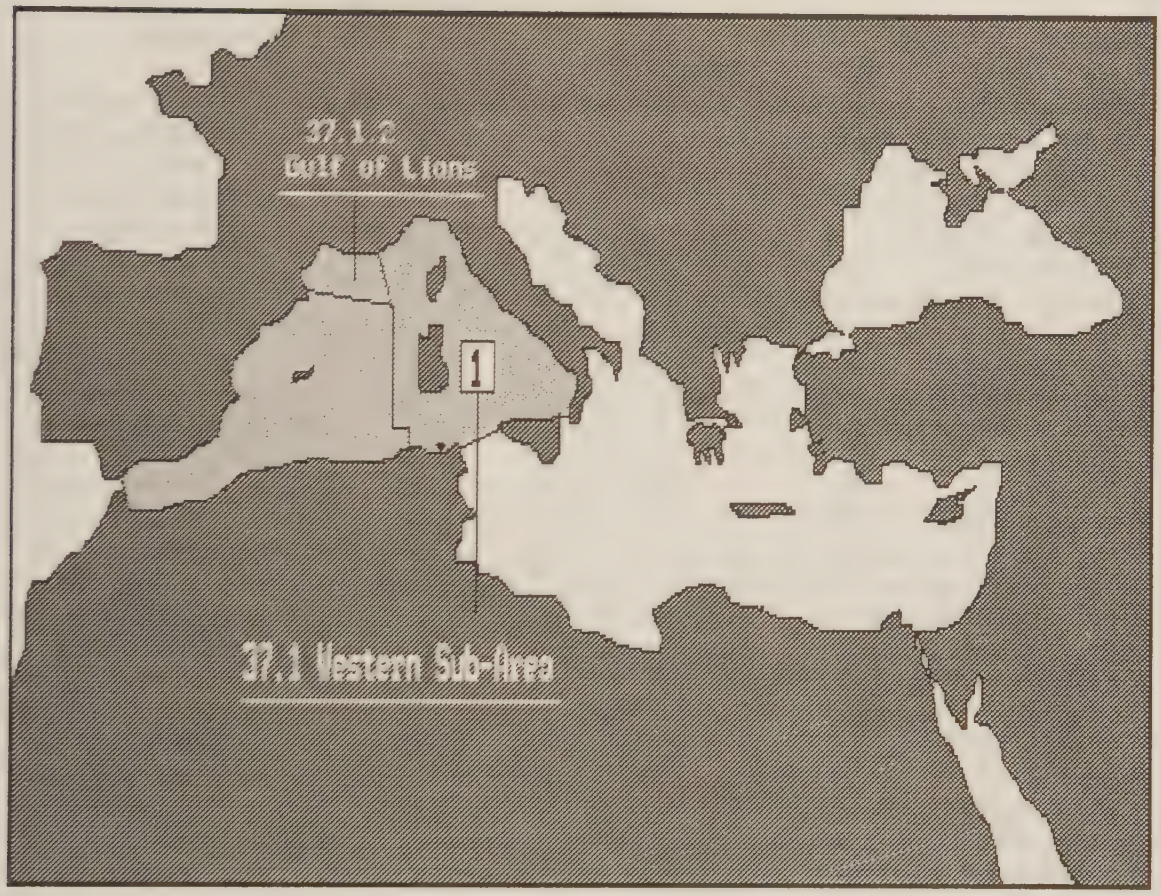
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.1.1 - BALEARIC
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... -0.87 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

3. MEDITERRANEAN AND BLACK SEA

37.1: Western Sub-Area

Division 37.1.2 - Gulf of Lions



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

France:78.85%, Spain:21.15%.

3.1 Diadromous fish and marine fish.

Table 3.1.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European pilchard(=Sardine)	1	15203	30.9 %	Rising
European anchovy	2	10660	21.7 %	Rising
Atlantic mackerel	3	5299	10.8 %	Rising
European hake	4	3896	7.9 %	Rising
Mullets nei	5	2201	4.5 %	Rising
Marine fishes nei	6	1537	3.1 %	Declining
Jack and horse mackerels nei	7	1343	2.7 %	Rising
European eel	8	1201	2.4 %	Stable (-)
Poor cod	9	996	2.0 %	Stable (-)
European conger	10	863	1.8 %	Rising
Bogue	11	774	1.6 %	Rising
Seabasses	12	554	1.1 %	Rising
Common sole	13	442	0.9 %	Rising
Silversides(=Sand smelts)	14	410	0.8 %	Rising
Demersal percomorphs nei	15	387	0.8 %	Sharp rise
Anglerfishes nei	16	370	0.8 %	Rising
Gilthead seabream	17	348	0.7 %	Declining
Surmullets(=Red mullets)	18	308	0.6 %	Rising
Gurnards, searobins nei	19	291	0.6 %	Stable (+)
Common pandora	20	242	0.5 %	Stable (-)
Megrim	21	239	0.5 %	Sharp rise
Blue whiting(=Poutassou)	22	217	0.4 %	Sharp rise
OTHER DIADROMOUS AND MARINE	23	1371	2.8 %	Rising
DIADROMOUS AND MARINE FISH		49152	100.0 %	Rising

Proportion coming from declining catches.....	3.8 %
from stable catches.....	5.6 %
from rising catches.....	90.6 %

Table 3.1.2

MEDITERRANEAN AND BLACK SEA - 37.1.2: Gulf of Lions
Proportions of producers of diadromous and marine fish - 1991 ranking

France:68.81%, Spain:31.18%.

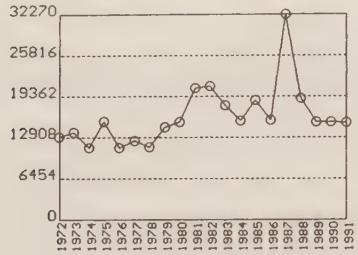
Table 3.1.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

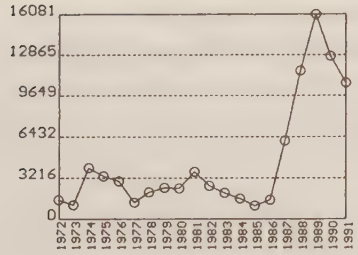
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European pilchard(=Sardine)	1	20967	1 51.0%	13000	2 31.2%
European anchovy	2	2645	3 6.4%	1500	4 3.6%
Atlantic mackerel	3	2747	2 6.7%	1486	5 3.6%
European hake	4	2264	5 5.5%	475	10 1.1%
Mullets nei	5	2303	4 5.6%	700	6 1.7%
Marine fishes nei	6	1030	8 2.5%	18788	1 45.1%
Jack and horse mackerels nei	7	330	16 0.8%	500	8 1.2%
European eel	8	798	10 1.9%	1869	3 4.5%
Poor cod	9	1116	6 2.7%	600	7 1.4%
European conger	10	642	12 1.6%	216	15 0.5%
Bogue	11	747	11 1.8%	0	30 0.0%
Seabasses	12	1050	7 2.6%	0	36 0.0%
Common sole	13	506	13 1.2%	498	9 1.2%
Silversides(=Sand smelts)	14	338	15 0.8%	0	25 0.0%
Demersal percomorphs nei	15	0	55 0.0%	0	54 0.0%
Anglerfishes nei	16	197	20 0.5%	0	24 0.0%
Gilthead seabream	17	199	19 0.5%	370	14 0.9%
Surmullets(=Red mullets)	18	325	17 0.8%	400	12 1.0%
Gurnards, searobins nei	19	341	14 0.8%	0	28 0.0%
Common pandora	20	1020	9 2.5%	0	33 0.0%
Megrim	21	22	31 0.1%	0	52 0.0%
Blue whiting(=Poutassou)	22	153	25 0.4%	0	45 0.0%
TOTALS		41156	100.0%	41670	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



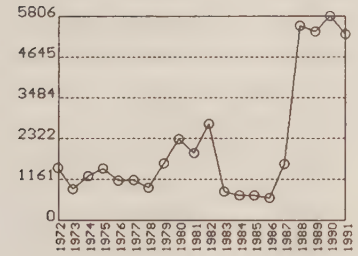
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 7.34 %
Rank..... 1 of 24 based on:1991
Percent to total..... 30.93 % , Cumulative: 30.93 %



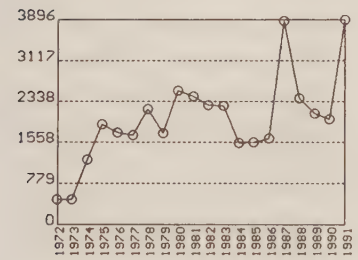
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 35.68 %
Rank..... 2 of 24 based on:1991
Percent to total..... 21.69 % , Cumulative: 52.62 %



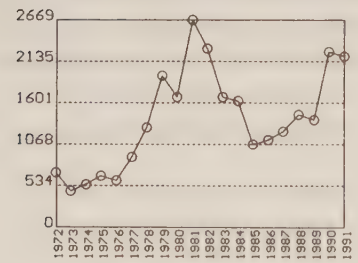
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic mackerel
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 28.73 %
Rank..... 3 of 24 based on:1991
Percent to total..... 10.78 % , Cumulative: 63.40 %



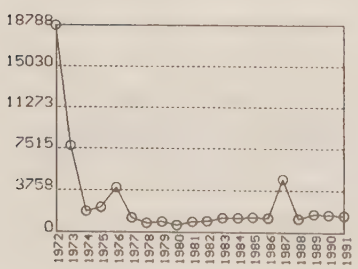
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 15.14 %
Rank..... 4 of 24 based on:1991
Percent to total..... 7.93 % , Cumulative: 71.33 %



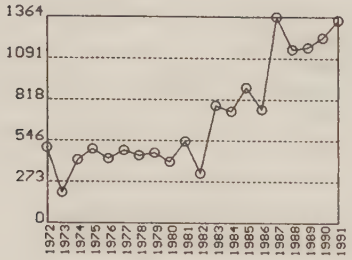
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 14.93 %
Rank..... 5 of 24 based on:1991
Percent to total..... 4.48 % , Cumulative: 75.80 %



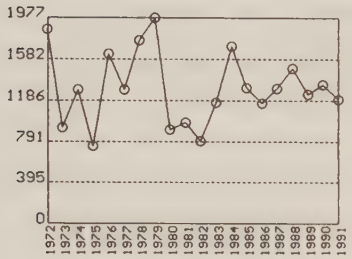
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 4 %
Trend index.....-36.64 %
Rank..... 6 of 24 based on:1991
Percent to total..... 3.13 % , Cumulative: 78.93 %



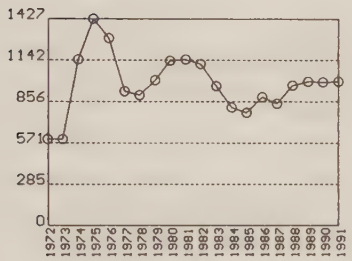
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 24.11 %
Rank..... 7 of 24 based on:1991
Percent to total..... 2.73 % , Cumulative: 81.66 %



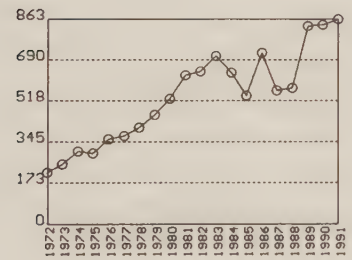
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European eel
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 25 %
Trend index..... -0.95 %
Rank..... 8 of 24 based on:1991
Percent to total..... 2.44 % , Cumulative: 84.11 %



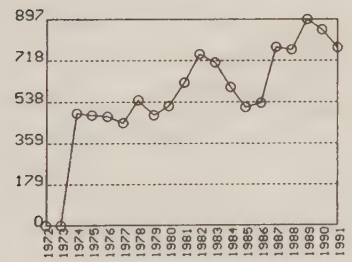
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Poor cod
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... -0.42 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.03 % , Cumulative: 86.15 %



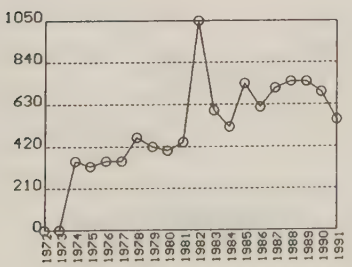
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European conger
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 18.48 %
Rank..... 10 of 24 based on:1991
Percent to total..... 1.76 % , Cumulative: 87.89 %



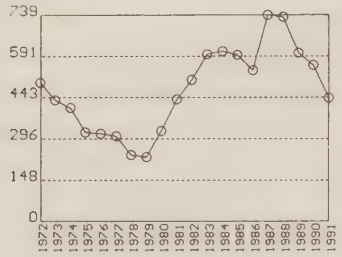
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 18.67 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.57 % , Cumulative: 89.46 %



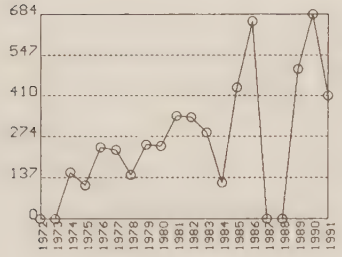
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Seabasses
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 20.72 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.13 % , Cumulative: 90.59 %



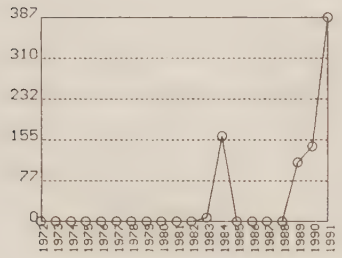
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 10.86 %
Rank..... 13 of 24 based on:1991
Percent to total..... 0.90 % , Cumulative: 91.49 %



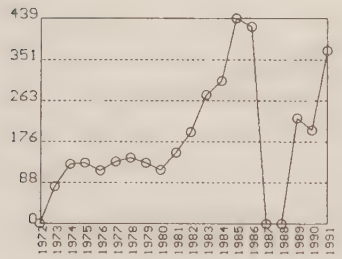
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Silversides(=Sand smelts)
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 24.01 %
Rank..... 14 of 24 based on:1991
Percent to total..... 0.83 % , Cumulative: 92.32 %



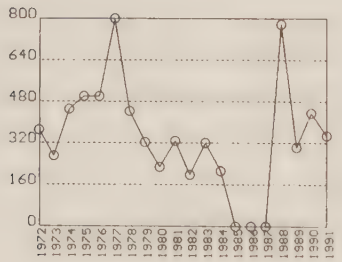
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Demersal percomorphs nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 72.12 %
Rank..... 15 of 24 based on:1991
Percent to total..... 0.79 % , Cumulative: 93.11 %



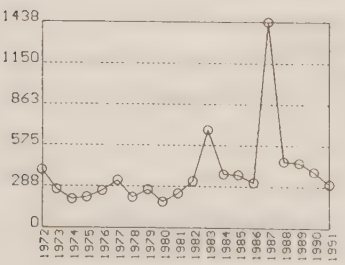
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Anglerfishes nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 18.29 %
Rank..... 16 of 24 based on:1991
Percent to total..... 0.75 % , Cumulative: 93.86 %



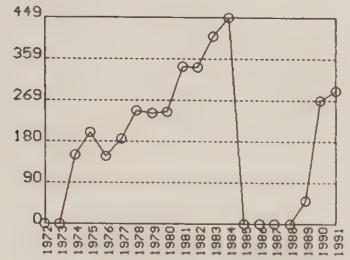
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gilthead seabream
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... -8.66 %
Rank..... 17 of 24 based on:1991
Percent to total..... 0.71 % , Cumulative: 94.57 %



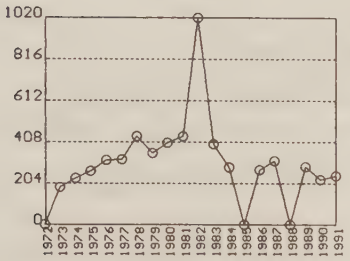
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 14.64 %
Rank..... 18 of 24 based on:1991
Percent to total..... 0.63 % , Cumulative: 95.20 %



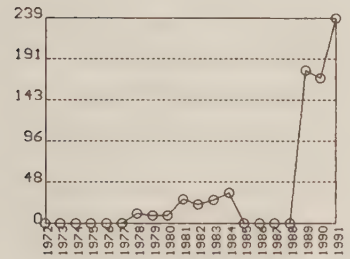
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gurnards, searobins nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 3.42 %
Rank..... 19 of 24 based on:1991
Percent to total..... 0.59 % , Cumulative: 95.79 %



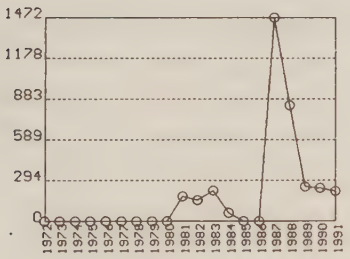
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common pandora
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... -0.55 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.49 % , Cumulative: 96.28 %



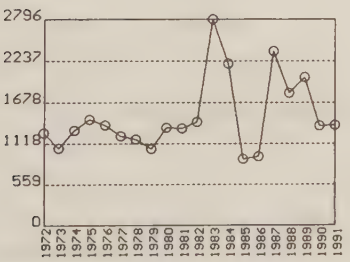
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Megrim
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 66.71 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.49 % , Cumulative: 96.77 %



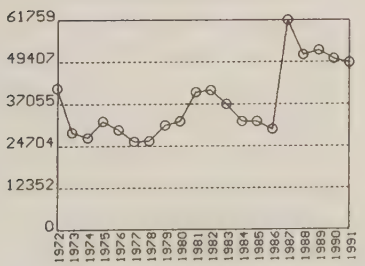
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue whiting(=Poutassou)
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 52.39 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.44 % , Cumulative: 97.21 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 6.28 %
Rank..... 23 of 24 based on:1991
Percent to total..... 2.80 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE FISH
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 10.10 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

3.2 Crustaceans

Table 3.2.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Production of crustaceans (top 10 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine crustaceans nei	1	185	33.4 %	Rising
Deepwater rose shrimp	2	137	24.7 %	Sharp rise
Norway lobster	3	112	20.2 %	Sharp rise
Common spiny lobster	4	47	8.5 %	Rising
Mediterranean shore crab	5	22	4.0 %	Rising
Caramote prawn	6	22	4.0 %	Sharp rise
Mantis squillid	7	13	2.4 %	Sharp rise
Common shrimp	8	8	1.4 %	Declining
European lobster	9	5	0.9 %	Stable (-)
Pink spiny lobster	10	2	0.4 %	Declining
OTHER CRUSTACEANS	11	1	0.2 %	Sharp decl
TOTAL CRUSTACEANS		554	100.0 %	Rising

Proportion coming from declining catches.....	2.0 %
from stable catches.....	0.9 %
from rising catches.....	97.1 %

Table 3.2.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Proportions of producers of crustaceans - 1991 ranking

Spain:85.74%, France:14.26%.

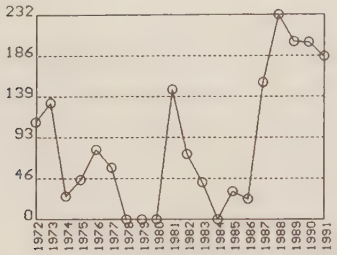
Table 3.2.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Production of crustaceans (top 10 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

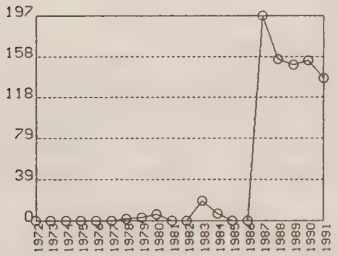
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Marine crustaceans nei	1	74	1 59.7%	110	1 26.2%
Deepwater rose shrimp	2	0	8 0.0%	0	14 0.0%
Norway lobster	3	0	14 0.0%	0	13 0.0%
Common spiny lobster	4	13	3 10.5%	13	6 3.1%
Mediterranean shore crab	5	13	4 10.5%	0	9 0.0%
Caramote prawn	6	0	9 0.0%	0	12 0.0%
Mantis squillid	7	0	10 0.0%	0	10 0.0%
Common shrimp	8	17	2 13.7%	84	4 20.0%
European lobster	9	4	5 3.2%	4	7 1.0%
Pink spiny lobster	10	2	6 1.6%	23	5 5.5%
TOTALS		124	100.0%	420	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



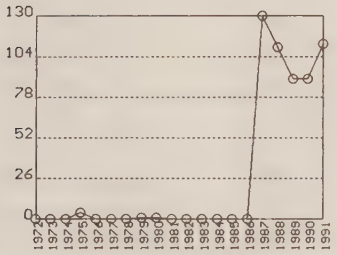
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 23.09 %
Rank..... 1 of 12 based on:1991
Percent to total..... 33.39 % , Cumulative: 33.39 %



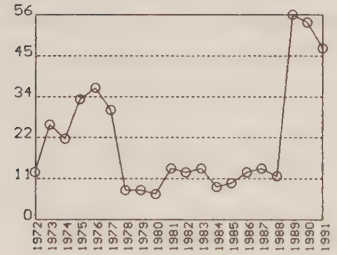
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Deepwater rose shrimp
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 67.11 %
Rank..... 2 of 12 based on:1991
Percent to total..... 24.73 % , Cumulative: 58.12 %



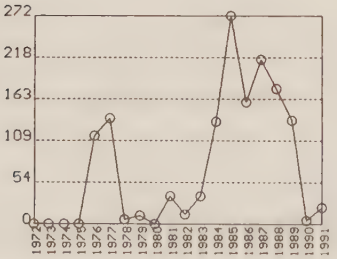
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 69.11 %
Rank..... 3 of 12 based on:1991
Percent to total..... 20.22 % , Cumulative: 78.34 %



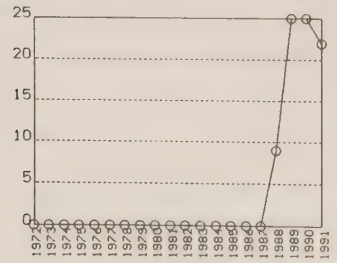
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common spiny lobster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 10.88 %
Rank..... 4 of 12 based on:1991
Percent to total..... 8.48 % , Cumulative: 86.82 %



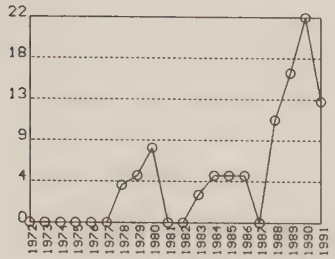
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean shore crab
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 28.01 %
Rank..... 5 of 12 based on:1991
Percent to total..... 3.97 % , Cumulative: 90.79 %



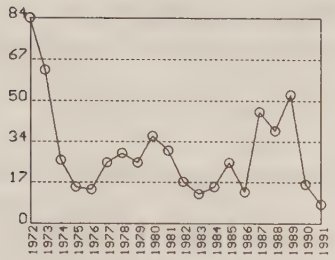
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation.....
Trend index..... 78.48 %
Rank..... 6 of 12 based on:1991
Percent to total..... 3.97 % , Cumulative: 94.77 %



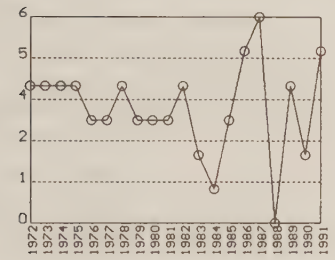
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 51.11 %
Rank..... 7 of 12 based on:1991
Percent to total..... 2.35 % , Cumulative: 97.11 %



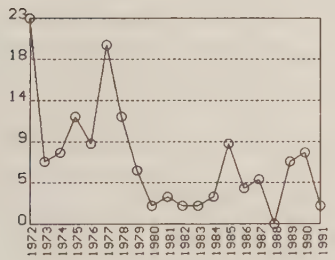
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common shrimp
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index.....-11.77 %
Rank..... 8 of 12 based on:1991
Percent to total..... 1.44 % , Cumulative: 98.56 %



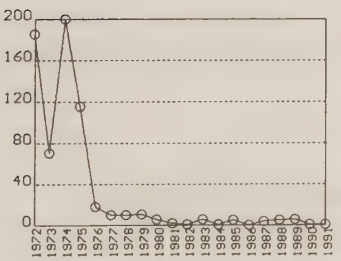
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... -2.49 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.90 % , Cumulative: 99.46 %



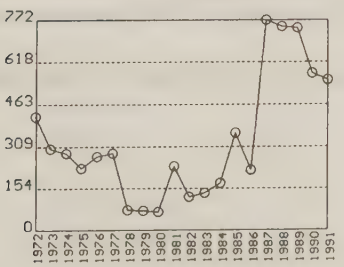
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Pink spiny lobster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 13 %
Trend index.....-25.73 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.36 % , Cumulative: 99.82 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER CRUSTACEANS
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-67.73 %
Rank..... 11 of 12 based on:1991
Percent to total..... 0.18 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 20.26 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

3.3 Molluscs

Table 3.3.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	16148	54.4 %	Stable (+)
Portuguese cupped oyster	2	10014	33.7 %	Rising
Common octopus	3	1250	4.2 %	Rising
Cuttlefishes, bobtail squids	4	545	1.8 %	Sharp rise
Common squids	5	516	1.7 %	Declining
Common cuttlefish	6	193	0.7 %	Stable (+)
European flat oyster	7	179	0.6 %	Rising
Grooved carpet shell	8	159	0.5 %	Sharp rise
Striped venus	9	114	0.4 %	Sharp rise
Donax clams	10	110	0.4 %	Rising
Squids nei	11	107	0.4 %	Sharp rise
Carpet shell	12	100	0.3 %	Rising
Octopuses	13	98	0.3 %	Sharp rise
Murex	14	96	0.3 %	Stable (-)
Clams nei	15	40	0.1 %	Declining
Marine molluscs nei	16	25	0.1 %	Sharp rise
Cephalopods nei	17	13	0.0 %	Sharp rise
Great scallop	18	0	0.0 %	Declining
Sea mussels nei	19	0	0.0 %	Sharp decl
Gastropods nei	20	0	0.0 %	Sharp rise
TOTAL MOLLUSCS		29707	100.0 %	Rising

Proportion coming from declining catches.....	1.9 %
from stable catches.....	55.3 %
from rising catches.....	42.8 %

Table 3.3.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Proportions of producers of molluscs - 1991 ranking

France:96.67%, Spain:3.33%.

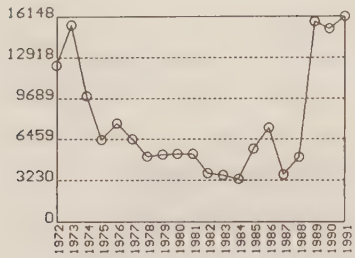
Table 3.3.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.2: Gulf of Lions
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

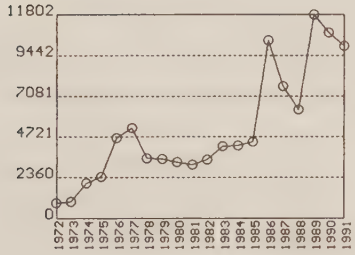
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mediterranean mussel	1	3773	1 39.1%	12299	1 82.5%
Portuguese cupped oyster	2	3410	2 35.3%	895	3 6.0%
Common octopus	3	1064	3 11.0%	0	9 0.0%
Cuttlefishes, bobtail squids	4	0	15 0.0%	0	14 0.0%
Common squids	5	292	5 3.0%	1400	2 9.4%
Common cuttlefish	6	367	4 3.8%	0	8 0.0%
European flat oyster	7	259	6 2.7%	114	5 0.8%
Grooved carpet shell	8	0	13 0.0%	0	12 0.0%
Striped venus	9	0	17 0.0%	0	16 0.0%
Donax clams	10	0	14 0.0%	0	13 0.0%
Squids nei	11	0	20 0.0%	0	19 0.0%
Carpet shell	12	232	7 2.4%	0	10 0.0%
Octopuses	13	0	12 0.0%	0	11 0.0%
Murex	14	110	9 1.1%	50	6 0.3%
Clams nei	15	110	8 1.1%	150	4 1.0%
Marine molluscs nei	16	10	11 0.1%	0	20 0.0%
Cephalopods nei	17	0	16 0.0%	0	15 0.0%
Great scallop	18	34	10 0.4%	7	7 0.1%
Sea mussels nei	19	0	18 0.0%	0	17 0.0%
Gastropods nei	20	0	19 0.0%	0	18 0.0%
TOTALS		9661	100.0%	14915	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



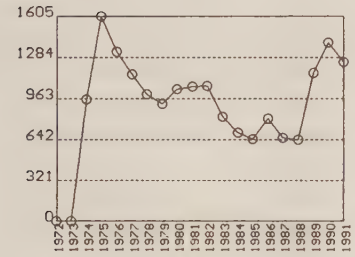
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 2.67 %
Rank..... 1 of 12 based on:1991
Percent to total..... 54.36 % , Cumulative: 54.36 %



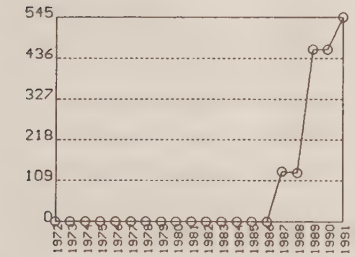
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Portuguese cupped oyster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 29.22 %
Rank..... 2 of 12 based on:1991
Percent to total..... 33.71 % , Cumulative: 88.07 %



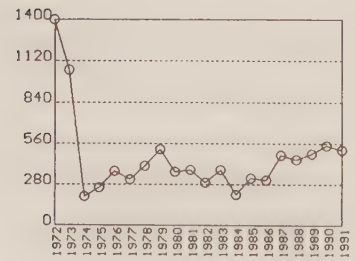
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 6.11 %
Rank..... 3 of 12 based on:1991
Percent to total..... 4.21 % , Cumulative: 92.27 %



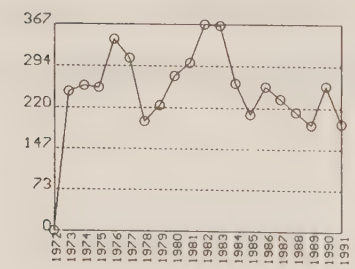
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cuttlefishes, bobtail squids
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 77.79 %
Rank..... 4 of 12 based on:1991
Percent to total..... 1.83 % , Cumulative: 94.11 %



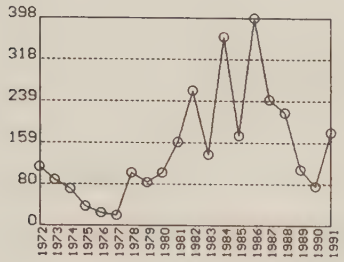
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-10.05 %
Rank..... 5 of 12 based on:1991
Percent to total..... 1.74 % , Cumulative: 95.85 %



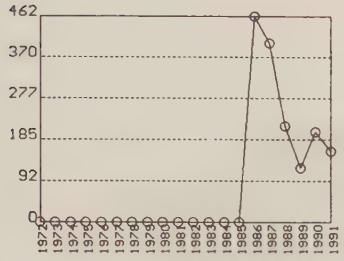
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 1.23 %
Rank..... 6 of 12 based on:1991
Percent to total..... 0.65 % , Cumulative: 96.50 %



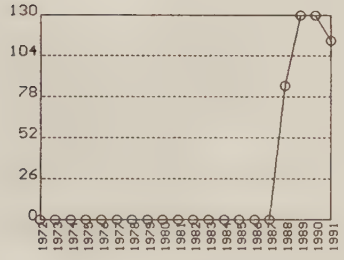
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flat oyster
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 19.03 %
Rank..... 7 of 12 based on:1991
Percent to total..... 0.60 % , Cumulative: 97.10 %



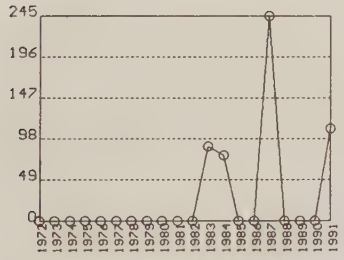
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Grooved carpet shell
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 59.94 %
Rank..... 8 of 12 based on:1991
Percent to total..... 0.54 % , Cumulative: 97.63 %



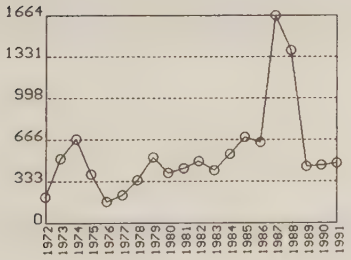
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation.....
Trend index..... 77.09 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.38 % , Cumulative: 98.02 %



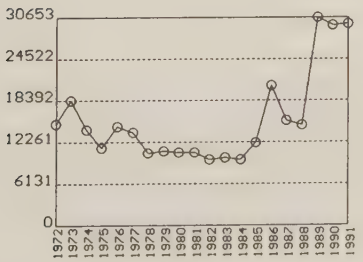
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Donax clams
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 49.64 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.37 % , Cumulative: 98.39 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER MOLLUSCS
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 15.73 %
Rank..... 11 of 12 based on:1991
Percent to total..... 1.60 % , Cumulative:100.00 %



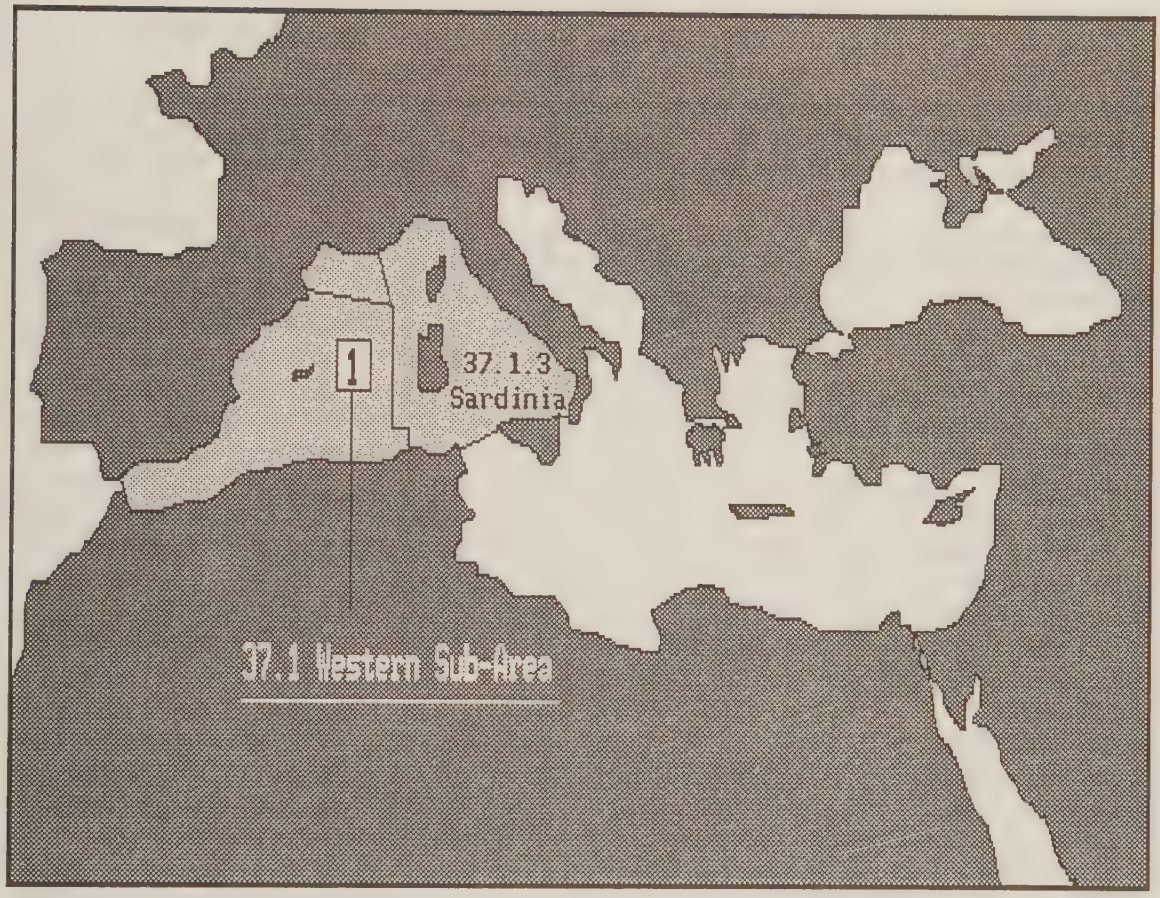
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.1.2 - GULF OF LIONS
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 12.70 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

4. MEDITERRANEAN AND BLACK SEA

37.1: Western Sub-Area

Division 37.1.3 - Sardinia



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Italy:79.95%, Tunisia:19.26%, France:0.79%.

4.1 Diadromous fish and marine fish.

Table 4.1.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine fishes nei	1	12377	23.5 %	Stable (+)
European pilchard(=Sardine)	2	4520	8.6 %	Declining
Bogue	3	3073	5.9 %	Declining
European hake	4	2690	5.1 %	Declining
European anchovy	5	2619	5.0 %	Declining
Gobies nei	6	2266	4.3 %	Rising
Surmullets(=Red mullets)	7	2249	4.3 %	Declining
Mullets nei	8	2086	4.0 %	Stable (-)
Sardinellas nei	9	1950	3.7 %	Rising
Jack and horse mackerels nei	10	1593	3.0 %	Stable (-)
Common dentex	11	1069	2.0 %	Rising
Scorpionfishes, nei	12	1036	2.0 %	Stable (+)
Common sole	13	1030	2.0 %	Rising
Porgies, seabreams, nei	14	995	1.9 %	Rising
Seabasses	15	988	1.9 %	Rising
Sargo breams, nei	16	966	1.8 %	Rising
Gilthead seabream	17	862	1.6 %	Rising
'Scomber' mackerels nei	18	834	1.6 %	Declining
Picarels	19	810	1.5 %	Declining
Anglerfishes nei	20	765	1.5 %	Rising
Smoothhounds	21	726	1.4 %	Declining
European eel	22	649	1.2 %	Declining
OTHER DIADROMOUS AND MARINE	23	6421	12.2 %	Rising
DIADROMOUS AND MARINE - TOTAL		52574	100.0 %	Declining

Proportion coming from declining catches.....	34.6 %
from stable catches.....	32.5 %
from rising catches.....	32.9 %

Table 4.1.2

MEDITERRANEAN AND BLACK SEA - 37.1.3: Sardinia
Proportions of producers of diadromous and marine fish - 1991 ranking

Italy:70.48%, Tunisia:28.42%, France:1.11%.

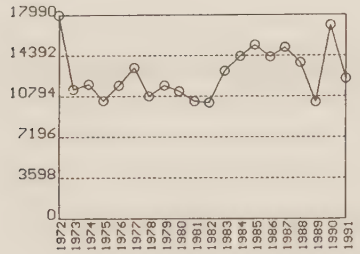
Table 4.1.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

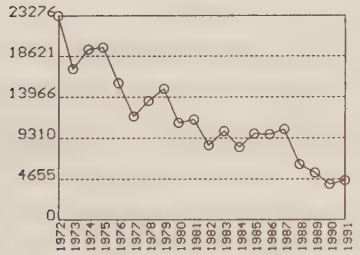
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Marine fishes nei	1	10267	2 14.7%	17990	3 14.3%
European pilchard(=Sardine)	2	8526	3 12.2%	23276	2 18.5%
Bogue	3	2260	8 3.2%	7584	5 6.0%
European hake	4	5347	4 7.7%	8934	4 7.1%
European anchovy	5	16323	1 23.4%	25671	1 20.4%
Gobies nei	6	1163	15 1.7%	1095	17 0.9%
Surmullets(=Red mullets)	7	2936	7 4.2%	6083	6 4.8%
Mullets nei	8	4001	5 5.7%	2237	10 1.8%
Sardinellas nei	9	177	32 0.3%	20	34 0.0%
Jack and horse mackerels nei	10	3383	6 4.8%	6059	7 4.8%
Common dentex	11	343	25 0.5%	696	23 0.6%
Scorpionfishes, nei	12	1027	16 1.5%	2177	11 1.7%
Common sole	13	1277	10 1.8%	1170	16 0.9%
Porgies, seabreams, nei	14	550	21 0.8%	1325	15 1.1%
Seabasses	15	613	19 0.9%	934	21 0.7%
Sargo breams, nei	16	547	22 0.8%	989	19 0.8%
Gilthead seabream	17	730	18 1.1%	502	25 0.4%
'Scomber' mackerels nei	18	1248	11 1.8%	3321	9 2.6%
Picarels	19	1241	12 1.8%	4920	8 3.9%
Anglerfishes nei	20	537	23 0.8%	946	20 0.8%
Smoothhounds	21	806	17 1.2%	1812	13 1.4%
European eel	22	1396	9 2.0%	1070	18 0.9%
TOTALS		69826	100.0%	125615	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



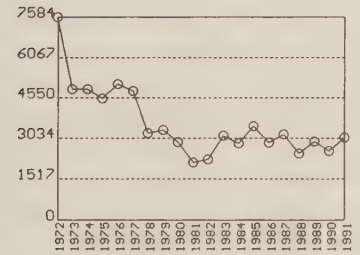
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 19 %
Trend index..... 1.95 %
Rank..... 1 of 24 based on:1991
Percent to total..... 23.54 % , Cumulative: 23.54 %



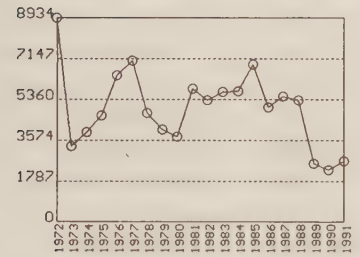
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-22.34 %
Rank..... 2 of 24 based on:1991
Percent to total..... 8.60 % , Cumulative: 32.14 %



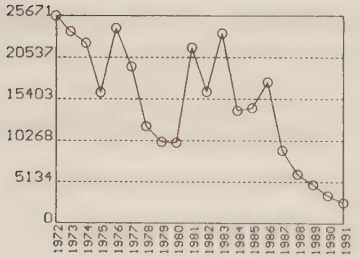
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-14.46 %
Rank..... 3 of 24 based on:1991
Percent to total..... 5.85 % , Cumulative: 37.98 %



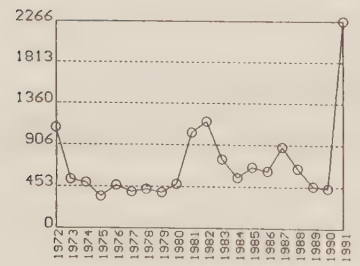
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... -7.07 %
Rank..... 4 of 24 based on:1991
Percent to total..... 5.12 % , Cumulative: 43.10 %



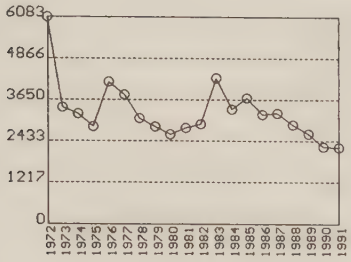
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index.....-20.66 %
Rank..... 5 of 24 based on:1991
Percent to total..... 4.98 % , Cumulative: 48.08 %



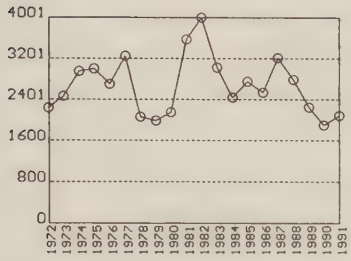
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gobies nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 11.56 %
Rank..... 6 of 24 based on:1991
Percent to total..... 4.31 % , Cumulative: 52.39 %



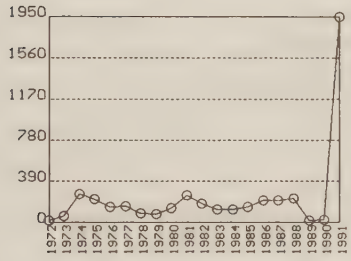
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -7.52 %
Rank..... 7 of 24 based on:1991
Percent to total..... 4.28 % , Cumulative: 56.67 %



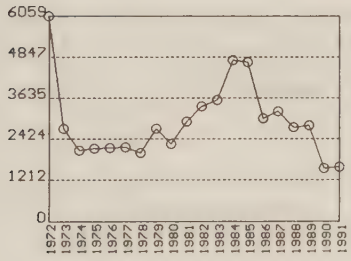
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... -1.45 %
Rank..... 8 of 24 based on:1991
Percent to total..... 3.97 % , Cumulative: 60.64 %



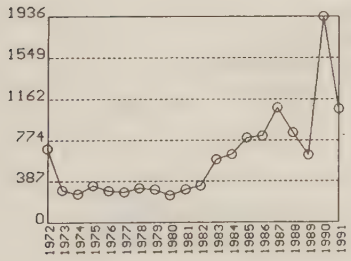
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sardinellas nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 34.90 %
Rank..... 9 of 24 based on:1991
Percent to total..... 3.71 % , Cumulative: 64.35 %



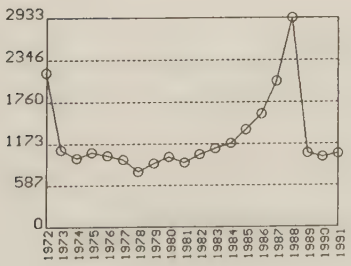
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -2.64 %
Rank..... 10 of 24 based on:1991
Percent to total..... 3.03 % , Cumulative: 67.38 %



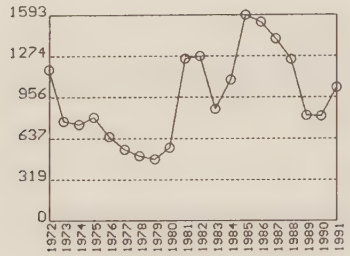
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common dentex
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 25.95 %
Rank..... 11 of 24 based on:1991
Percent to total..... 2.03 % , Cumulative: 69.41 %



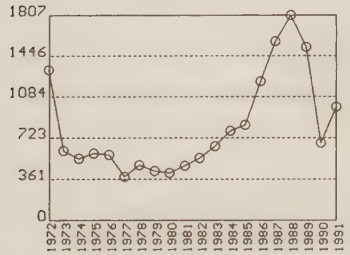
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Scorpionfishes, nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 4.81 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.97 % , Cumulative: 71.38 %



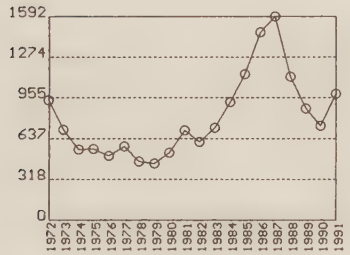
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 8.35 %
Rank..... 13 of 24 based on:1991
Percent to total..... 1.96 % , Cumulative: 73.34 %



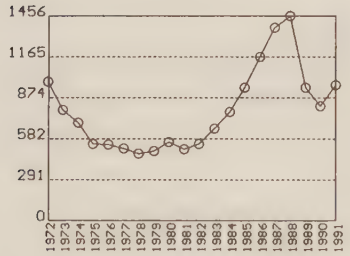
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Porgies, seabreams, nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 14.12 %
Rank..... 14 of 24 based on:1991
Percent to total..... 1.89 % , Cumulative: 75.23 %



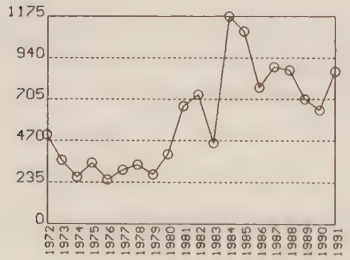
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Seabasses
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 12.18 %
Rank..... 15 of 24 based on:1991
Percent to total..... 1.88 % , Cumulative: 77.11 %



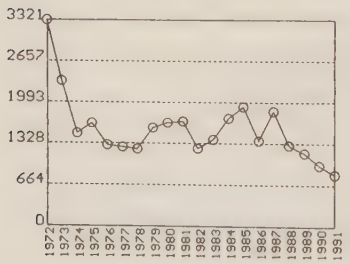
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sargo breams, nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 10.72 %
Rank..... 16 of 24 based on:1991
Percent to total..... 1.84 % , Cumulative: 78.95 %



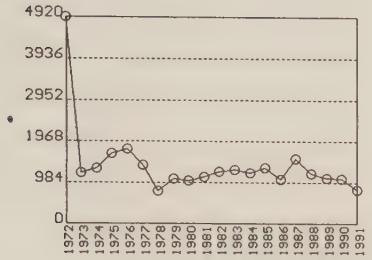
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gilthead seabream
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 18.56 %
Rank..... 17 of 24 based on:1991
Percent to total..... 1.64 % , Cumulative: 80.59 %



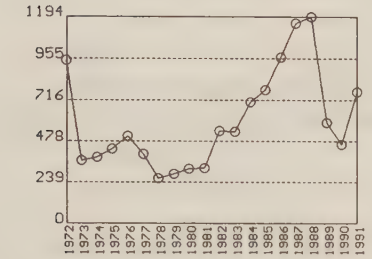
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....'Scomber' mackerels nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index.....-10.38 %
Rank..... 18 of 24 based on:1991
Percent to total..... 1.59 % , Cumulative: 82.18 %



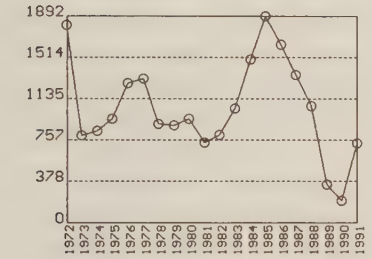
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index.....-15.18 %
Rank..... 19 of 24 based on:1991
Percent to total..... 1.54 % , Cumulative: 83.72 %



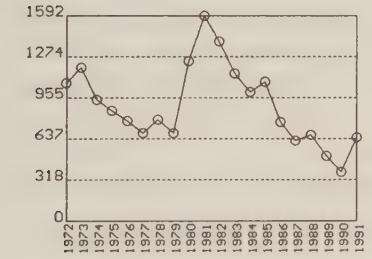
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Anglerfishes nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 11.89 %
Rank..... 20 of 24 based on:1991
Percent to total..... 1.46 % , Cumulative: 85.17 %



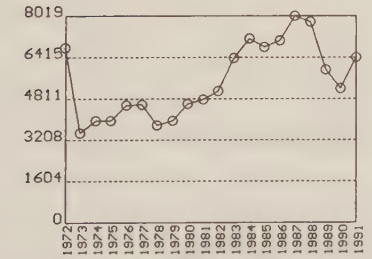
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Smoothhounds
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... -5.14 %
Rank..... 21 of 24 based on:1991
Percent to total..... 1.38 % , Cumulative: 86.55 %



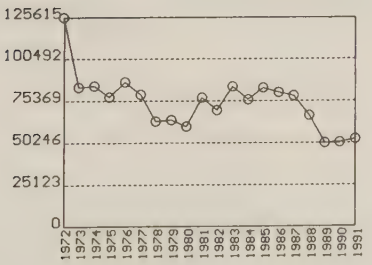
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European eel
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -7.52 %
Rank..... 22 of 24 based on:1991
Percent to total..... 1.23 % , Cumulative: 87.79 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 8.84 %
Rank..... 23 of 24 based on:1991
Percent to total..... 12.21 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... -7.69 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

4.2 Crustaceans

Table 4.2.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine crustaceans nei	1	1538	44.0 %	Rising
Mantis squillid	2	728	20.8 %	Stable (-)
Natantian decapods nei	3	575	16.4 %	Stable (-)
Norway lobster	4	480	13.7 %	Rising
Palinurid spiny lobsters nei	5	126	3.6 %	Stable (-)
Common spiny lobster	6	30	0.9 %	Stable (-)
Caramote prawn	7	16	0.5 %	Rising
Spinous spider crab	8	4	0.1 %	Stable (-)
Common shrimp	9	1	0.0 %	Declining
European lobster	10	0	0.0 %	Declining
Marine crabs nei	11	0	0.0 %	Sharp decl
Deepwater rose shrimp	12	0	0.0 %	Sharp rise
CRUSTACEANS - TOTAL		3498	100.0 %	Stable (+)

Proportion coming from declining catches.....	0.0 %
from stable catches.....	41.8 %
from rising catches.....	58.2 %

Table 4.2.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Proportions of producers of crustaceans - 1991 ranking

Italy:90.14%, Tunisia:8.09%, France:1.77%.

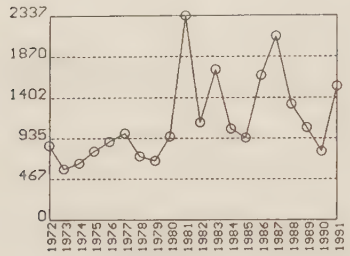
Table 4.2.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

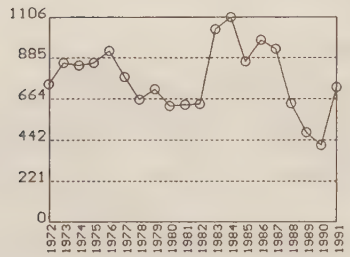
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Marine crustaceans nei	1	1117	2 19.6%	856	2 10.2%
Mantis squillid	2	635	3 11.2%	743	3 8.8%
Natantian decapods nei	3	3186	1 55.9%	5462	1 64.9%
Norway lobster	4	504	4 8.9%	640	4 7.6%
Palinurid spiny lobsters nei	5	138	5 2.4%	625	5 7.4%
Common spiny lobster	6	76	6 1.3%	15	8 0.2%
Caramote prawn	7	13	8 0.2%	52	6 0.6%
Spinous spider crab	8	18	7 0.3%	0	12 0.0%
Common shrimp	9	0	10 0.0%	3	10 0.0%
European lobster	10	8	9 0.1%	4	9 0.1%
Marine crabs nei	11	0	11 0.0%	17	7 0.2%
Deepwater rose shrimp	12	0	12 0.0%	0	11 0.0%
TOTALS		5695	100.0%	8417	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



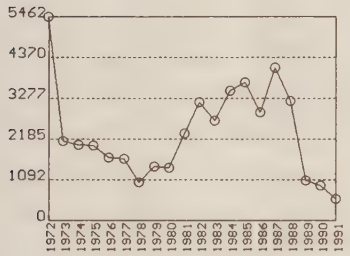
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 11.10 %
Rank..... 1 of 12 based on:1991
Percent to total..... 43.97 % , Cumulative: 43.97 %



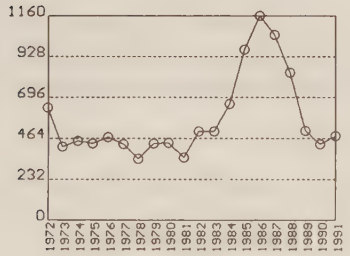
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -2.91 %
Rank..... 2 of 12 based on:1991
Percent to total..... 20.81 % , Cumulative: 64.78 %



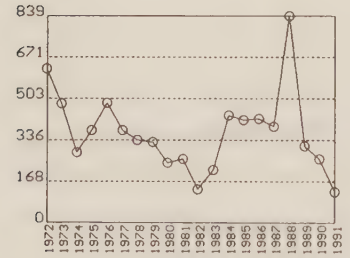
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... -4.11 %
Rank..... 3 of 12 based on:1991
Percent to total..... 16.44 % , Cumulative: 81.22 %



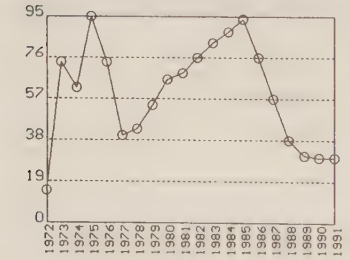
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 9.10 %
Rank..... 4 of 12 based on:1991
Percent to total..... 13.72 % , Cumulative: 94.94 %



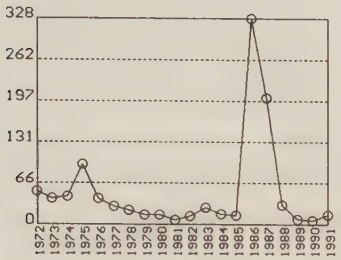
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... -4.29 %
Rank..... 5 of 12 based on:1991
Percent to total..... 3.60 % , Cumulative: 98.54 %



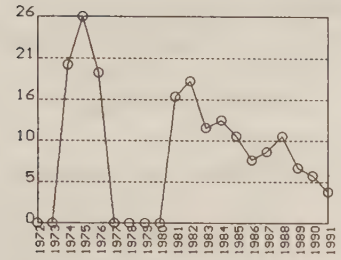
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common spiny lobster
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -3.77 %
Rank..... 6 of 12 based on:1991
Percent to total..... 0.86 % , Cumulative: 99.40 %



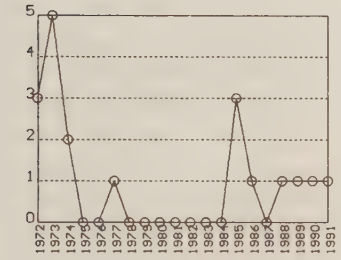
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 8.27 %
Rank..... 7 of 12 based on:1991
Percent to total..... 0.46 % , Cumulative: 99.86 %



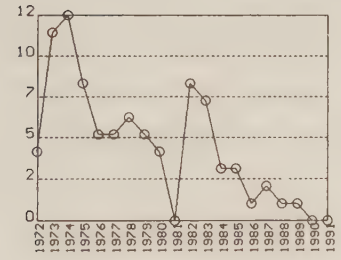
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Spinous spider crab
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... -1.85 %
Rank..... 8 of 12 based on:1991
Percent to total..... 0.11 % , Cumulative: 99.97 %



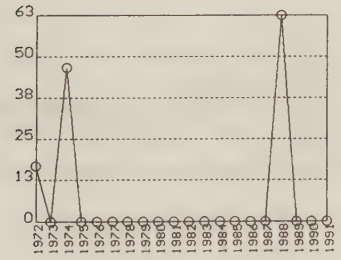
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common shrimp
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index.....-21.81 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.03 % , Cumulative:100.00 %



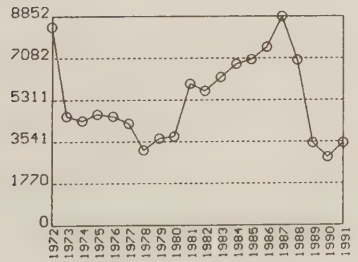
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index.....-33.33 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER CRUSTACEANS
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -7.84 %
Rank.....
.....



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 0.81 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

4.3 Molluscs

Table 4.3.1

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	15928	61.3 %	Rising
Common octopus	2	2390	9.2 %	Stable (-)
Marine molluscs nei	3	2159	8.3 %	Rising
Common cuttlefish	4	1597	6.2 %	Stable (+)
Common squids	5	1135	4.4 %	Stable (-)
European flying squid	6	1037	4.0 %	Stable (-)
Horned and musky octopuses	7	886	3.4 %	Rising
Striped venus	8	764	2.9 %	Declining
Octopuses	9	72	0.3 %	Rising
Cephalopods nei	10	0	0.0 %	Sharp decl
Portuguese cupped oyster	11	0	0.0 %	Rising
Squids nei	12	0	0.0 %	Rising
European flat oyster	13	0	0.0 %	Sharp decl
TOTAL MOLLUSCS		25968	100.0 %	Rising

Proportion coming from declining catches.....	2.9 %
from stable catches.....	23.7 %
from rising catches.....	73.3 %

Table 4.3.2

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Proportions of producers of molluscs - 1991 ranking

Italy:97.75%, Tunisia:2.24%, France:0.00%.

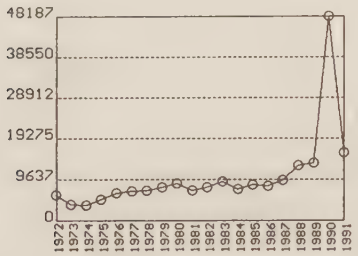
Table 4.3.3

MEDITERRANEAN AND BLACK SEA - Western Sub-Area

Division 37.1.3: Sardinia
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

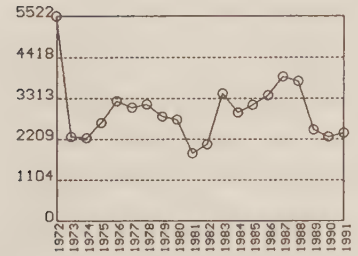
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mediterranean mussel	1	7783	1 35.3%	6091	1 28.0%
Common octopus	2	2072	5 9.4%	5522	2 25.4%
Marine molluscs nei	3	3153	3 14.3%	0	13 0.0%
Common cuttlefish	4	4021	2 18.2%	3392	3 15.6%
Common squids	5	629	7 2.9%	2552	4 11.8%
European flying squid	6	664	6 3.0%	1628	5 7.5%
Horned and musky octopuses	7	564	8 2.6%	1469	6 6.8%
Striped venus	8	3064	4 13.9%	878	7 4.0%
Octopuses	9	20	10 0.1%	54	9 0.3%
Cephalopods nei	10	0	13 0.0%	105	8 0.5%
Portuguese cupped oyster	11	71	9 0.3%	0	11 0.0%
Squids nei	12	0	11 0.0%	0	12 0.0%
European flat oyster	13	0	12 0.0%	37	10 0.2%
TOTALS		22041	100.0%	21728	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



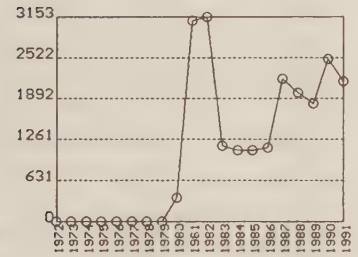
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 29.13 %
Rank..... 1 of 12 based on:1991
Percent to total..... 61.34 % , Cumulative: 61.34 %



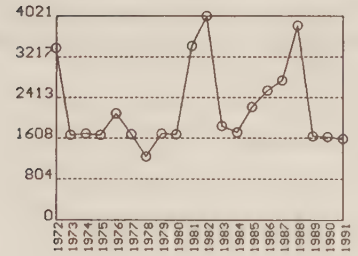
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... -2.30 %
Rank..... 2 of 12 based on:1991
Percent to total..... 9.20 % , Cumulative: 70.54 %



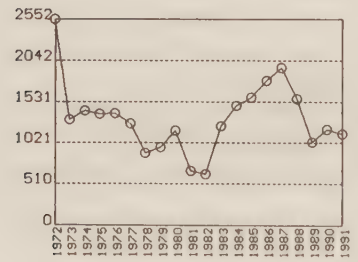
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 40.82 %
Rank..... 3 of 12 based on:1991
Percent to total..... 8.31 % , Cumulative: 78.85 %



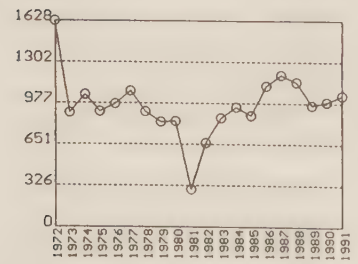
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 1.67 %
Rank..... 4 of 12 based on:1991
Percent to total..... 6.15 % , Cumulative: 85.00 %



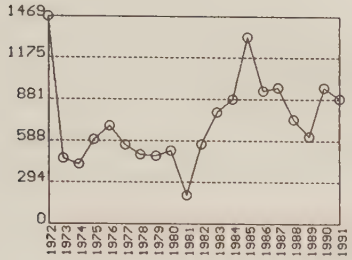
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -2.47 %
Rank..... 5 of 12 based on:1991
Percent to total..... 4.37 % , Cumulative: 89.38 %



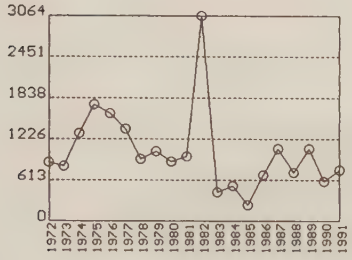
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flying squid
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -1.09 %
Rank..... 6 of 12 based on:1991
Percent to total..... 3.99 % , Cumulative: 93.37 %



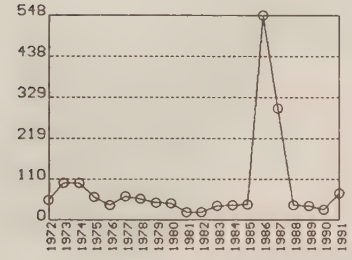
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Horned and musky octopuses
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 5.72 %
Rank..... 7 of 12 based on:1991
Percent to total..... 3.41 % , Cumulative: 96.78 %



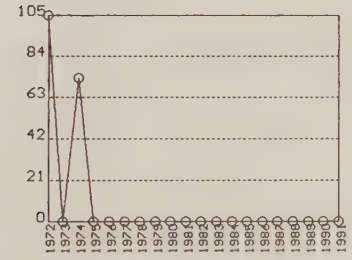
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... -9.41 %
Rank..... 8 of 12 based on:1991
Percent to total..... 2.94 % , Cumulative: 99.72 %



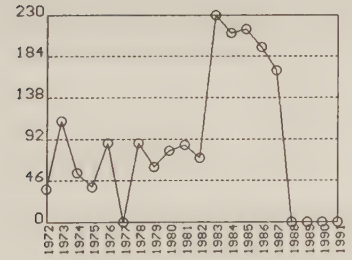
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 13.44 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.28 % , Cumulative:100.00 %



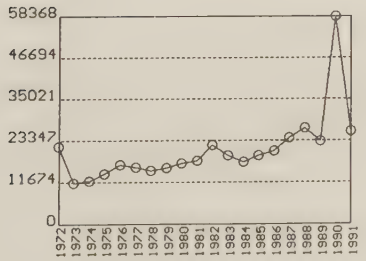
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cephalopods nei
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index.....-82.67 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER MOLLUSCS
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 2.07 %
Rank.....
.....



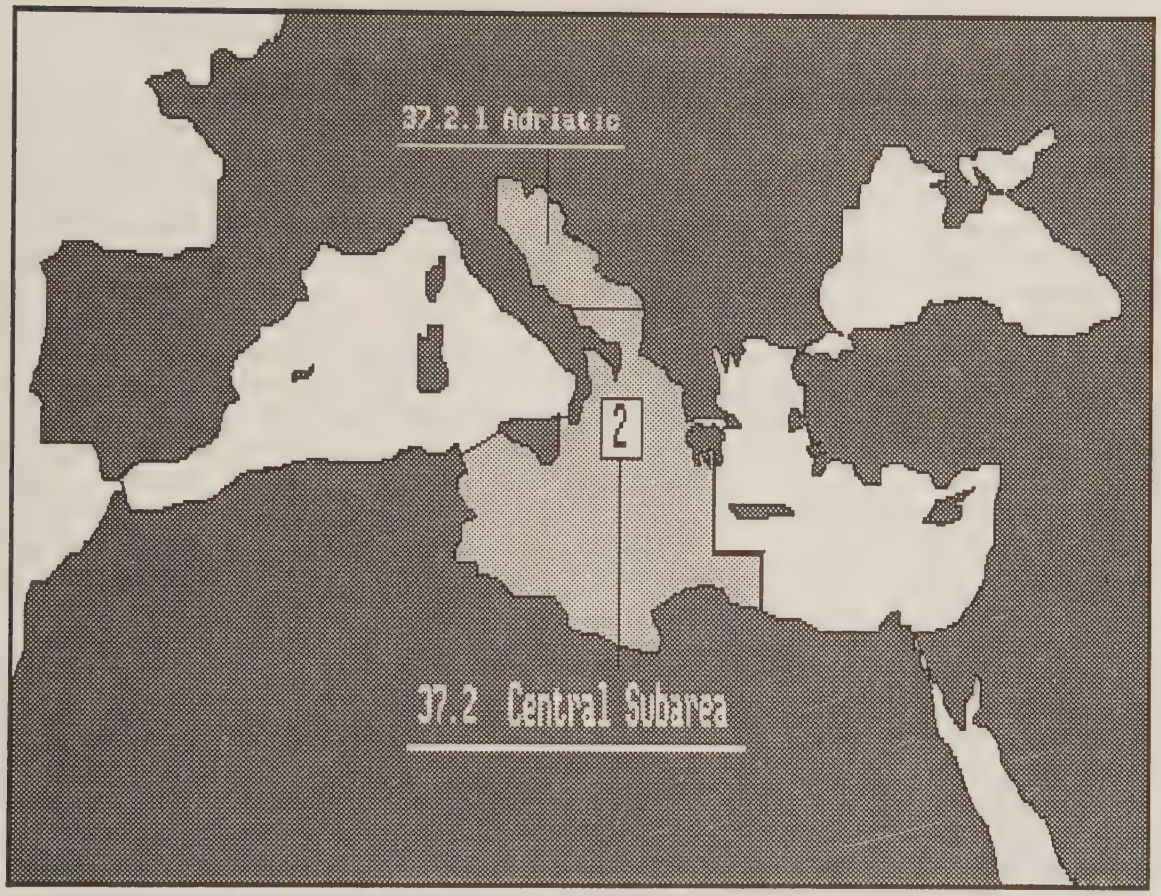
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.1.3 - SARDINIA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 15.89 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

5. MEDITERRANEAN AND BLACK SEA

37.2: Central Sub-Area

Division 37.2.1 - Adriatic



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Italy:88.99%, Yugoslav SFR:11.01%, Greece:0.00%.

5.1 Diadromous fish and marine fish.

Table 5.1.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic

Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European pilchard(=Sardine)	1	44512	48.8 %	Rising
European anchovy	2	13076	14.3 %	Declining
Marine fishes nei	3	7875	8.6 %	Declining
European hake	4	4105	4.5 %	Stable (+)
Jack and horse mackerels nei	5	2655	2.9 %	Stable (-)
European eel	6	2295	2.5 %	Rising
Mullets nei	7	1949	2.1 %	Declining
Surmullets(=Red mullets)	8	1853	2.0 %	Stable (+)
Silversides(=Sand smelts)	9	1677	1.8 %	Declining
'Scomber' mackerels nei	10	1085	1.2 %	Rising
Gobies nei	11	1021	1.1 %	Declining
Common sole	12	1015	1.1 %	Stable (-)
Blue whiting(=Poutassou)	13	907	1.0 %	Stable (-)
Bogue	14	729	0.8 %	Declining
Picarels	15	694	0.8 %	Declining
Seabasses	16	648	0.7 %	Rising
Flatfishes nei	17	553	0.6 %	Stable (+)
Mediterranean horse mackerel	18	517	0.6 %	Rising
Scorpionfishes, nei	19	492	0.5 %	Rising
Gilthead seabream	20	436	0.5 %	Rising
Smoothhounds	21	328	0.4 %	Stable (-)
Anglerfishes nei	22	294	0.3 %	Rising
OTHER DIADROMOUS AND MARINE	23	2470	2.7 %	Declining
DIADROMOUS AND MARINE - TOTAL		91186	100.0 %	Stable (-)

Proportion coming from declining catches.....	32.4 %
from stable catches.....	12.5 %
from rising catches.....	55.1 %

Table 5.1.2

MEDITERRANEAN AND BLACK SEA - 37.2.1: Adriatic

Proportions of producers of diadromous and marine fish - 1991 ranking

Italy:76.43%, Yugoslav SFR:23.57%, Greece:0.00%.

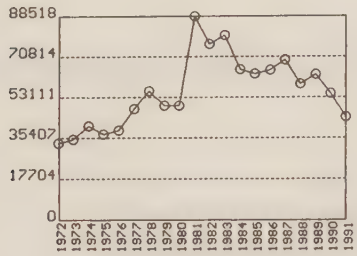
Table 5.1.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

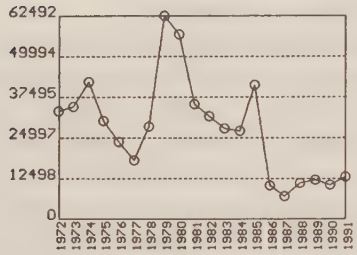
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European pilchard(=Sardine)	1	76417	1 44.3%	33245	1 25.2%
European anchovy	2	31638	2 18.4%	33176	2 25.2%
Marine fishes nei	3	20498	3 11.9%	32806	3 24.9%
European hake	4	9433	4 5.5%	2531	8 1.9%
Jack and horse mackerels nei	5	3934	5 2.3%	2332	9 1.8%
European eel	6	345	23 0.2%	963	15 0.7%
Mullets nei	7	2708	9 1.6%	4081	4 3.1%
Surmullets(=Red mullets)	8	3190	8 1.9%	967	14 0.7%
Silversides(=Sand smelts)	9	1861	12 1.1%	3226	5 2.5%
'Scomber' mackerels nei	10	1899	11 1.1%	544	18 0.4%
Gobies nei	11	3542	7 2.1%	2982	6 2.3%
Common sole	12	1046	15 0.6%	1482	11 1.1%
Blue whiting(=Poutassou)	13	892	17 0.5%	525	20 0.4%
Bogue	14	2123	10 1.2%	2269	10 1.7%
Picarels	15	598	19 0.4%	1212	12 0.9%
Seabasses	16	299	24 0.2%	221	27 0.2%
Flatfishes nei	17	642	18 0.4%	556	17 0.4%
Mediterranean horse mackerel	18	1333	14 0.8%	1154	13 0.9%
Scorpionfishes, nei	19	924	16 0.5%	310	24 0.2%
Gilthead seabream	20	101	35 0.1%	288	25 0.2%
Smoothhounds	21	1704	13 1.0%	539	19 0.4%
Anglerfishes nei	22	447	22 0.3%	366	23 0.3%
TOTALS		172458	100.0%	131799	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



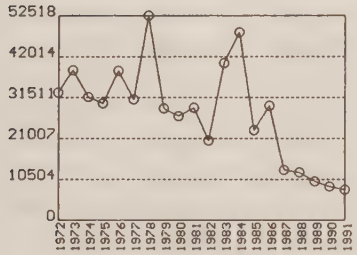
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 8.00 %
Rank..... 1 of 24 based on:1991
Percent to total..... 48.81 % , Cumulative: 48.81 %



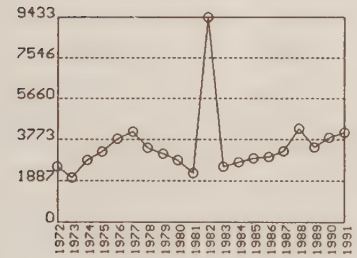
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-16.41 %
Rank..... 2 of 24 based on:1991
Percent to total..... 14.34 % , Cumulative: 63.15 %



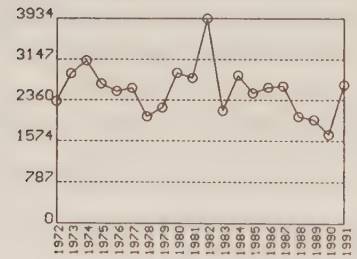
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 15 %
Trend index.....-16.41 %
Rank..... 3 of 24 based on:1991
Percent to total..... 8.64 % , Cumulative: 71.79 %



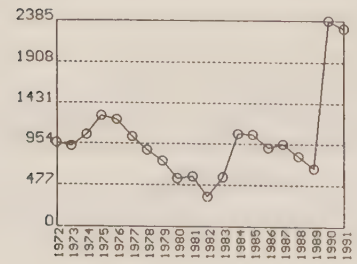
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 4.68 %
Rank..... 4 of 24 based on:1991
Percent to total..... 4.50 % , Cumulative: 76.29 %



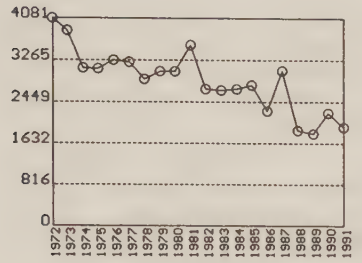
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... -3.08 %
Rank..... 5 of 24 based on:1991
Percent to total..... 2.91 % , Cumulative: 79.20 %



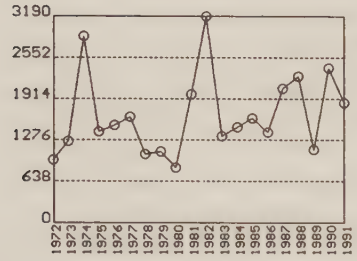
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European eel
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 8.60 %
Rank..... 6 of 24 based on:1991
Percent to total..... 2.52 % , Cumulative: 81.72 %



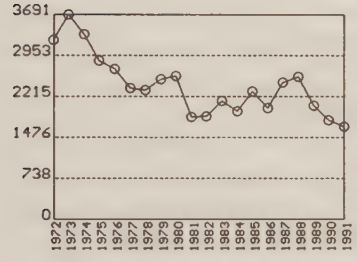
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... -9.82 %
Rank..... 7 of 24 based on:1991
Percent to total..... 2.14 % , Cumulative: 83.86 %



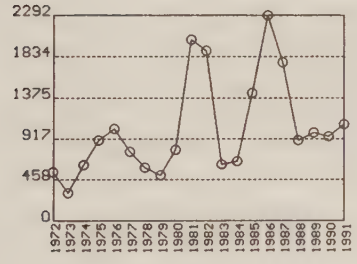
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 23 %
Trend index..... 4.76 %
Rank..... 8 of 24 based on:1991
Percent to total..... 2.03 % , Cumulative: 85.89 %



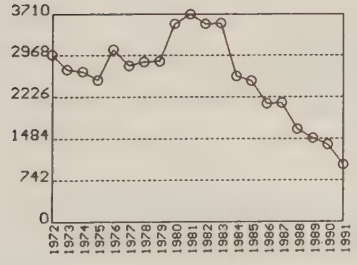
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Silversides(=Sand smelts)
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -9.35 %
Rank..... 9 of 24 based on:1991
Percent to total..... 1.84 % , Cumulative: 87.73 %



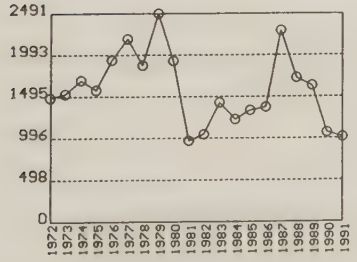
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....'Scomber' mackerels nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 12.53 %
Rank..... 10 of 24 based on:1991
Percent to total..... 1.19 % , Cumulative: 88.92 %



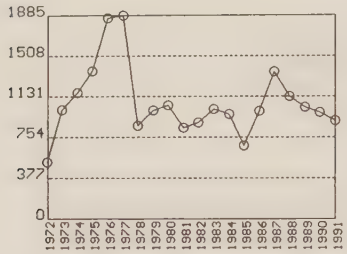
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gobies nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 4 %
Trend index.....-10.06 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.12 % , Cumulative: 90.04 %



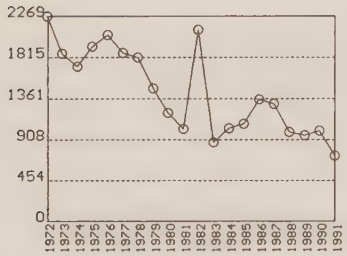
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -4.59 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.11 % , Cumulative: 91.15 %



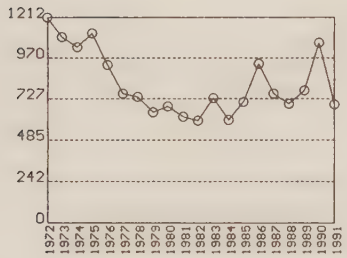
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue whiting(=Poutassou)
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... -2.92 %
Rank..... 13 of 24 based on:1991
Percent to total..... 0.99 % , Cumulative: 92.15 %



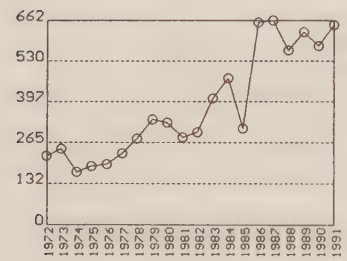
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index.....-14.52 %
Rank..... 14 of 24 based on:1991
Percent to total..... 0.80 % , Cumulative: 92.95 %



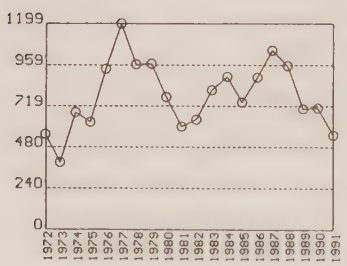
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... -5.91 %
Rank..... 15 of 24 based on:1991
Percent to total..... 0.76 % , Cumulative: 93.71 %



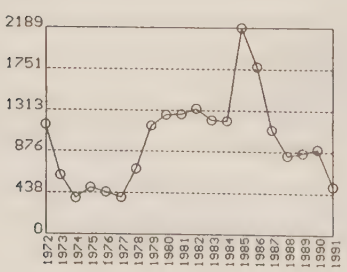
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Seabasses
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 22.07 %
Rank..... 16 of 24 based on:1991
Percent to total..... 0.71 % , Cumulative: 94.42 %



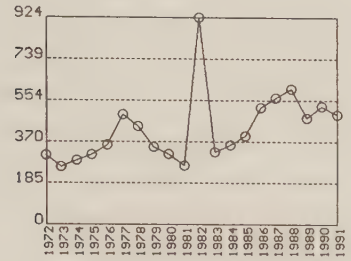
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Flatfishes nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 1.99 %
Rank..... 17 of 24 based on:1991
Percent to total..... 0.61 % , Cumulative: 95.02 %



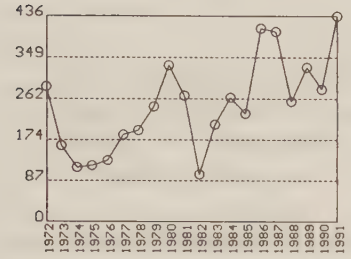
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean horse mackerel
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 8.34 %
Rank..... 18 of 24 based on:1991
Percent to total..... 0.57 % , Cumulative: 95.59 %



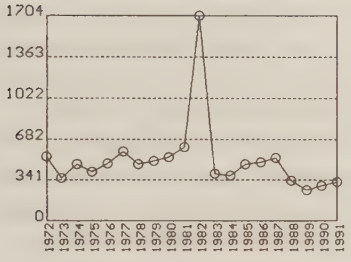
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Scorpionfishes, nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 9.89 %
Rank..... 19 of 24 based on:1991
Percent to total..... 0.54 % , Cumulative: 96.13 %



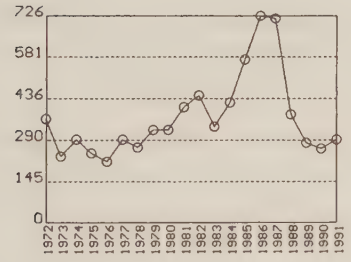
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gilthead seabream
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 14.03 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.48 % , Cumulative: 96.61 %



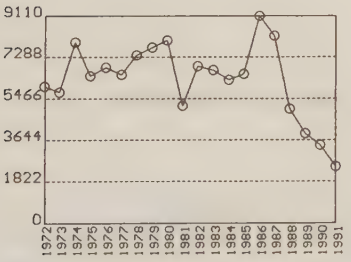
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Smoothhounds
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -4.49 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.36 % , Cumulative: 96.97 %



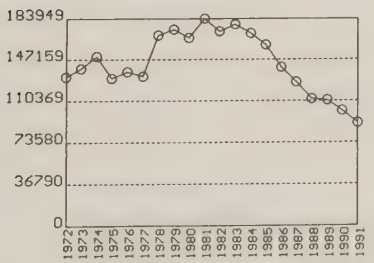
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Anglerfishes nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 8.26 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.32 % , Cumulative: 97.29 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... -6.13 %
Rank..... 23 of 24 based on:1991
Percent to total..... 2.74 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE - TOTAL
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... -3.83 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

5.2 Crustaceans

Table 5.2.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mantis squillid	1	2877	45.0 %	Stable (-)
Norway lobster	2	2024	31.6 %	Rising
Marine crustaceans nei	3	1060	16.6 %	Stable (-)
Natantian decapods nei	4	363	5.7 %	Rising
Spinous spider crab	5	29	0.5 %	Declining
Palinurid spiny lobsters nei	6	26	0.4 %	Rising
European lobster	7	19	0.3 %	Rising
TOTAL CRUSTACEANS		6398	100.0 %	Stable (+)

Proportion coming from declining catches.....	0.5 %
from stable catches.....	61.5 %
from rising catches.....	38.0 %

Table 5.2.2

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Proportions of producers of crustaceans - 1991 ranking

Italy:94.51%, Yugoslav SFR:5.49%.

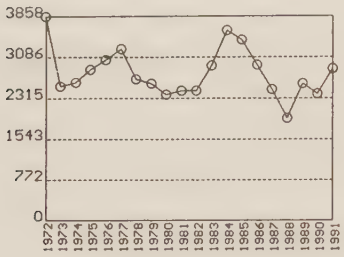
Table 5.2.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

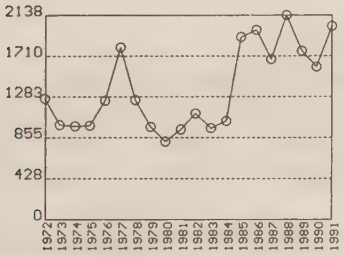
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mantis squillid	1	2467	1 45.1%	3858	1 58.6%
Norway lobster	2	1113	3 20.3%	1267	2 19.2%
Marine crustaceans nei	3	569	4 10.4%	1146	3 17.4%
Natantian decapods nei	4	1166	2 21.3%	159	4 2.4%
Spinous spider crab	5	34	6 0.6%	121	5 1.8%
Palinurid spiny lobsters nei	6	100	5 1.8%	35	6 0.5%
European lobster	7	26	7 0.5%	0	7 0.0%
TOTALS		5475	100.0%	6586	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



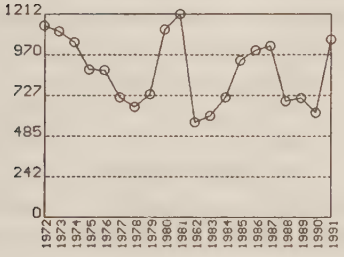
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... -2.59 %
Rank..... 1 of 8 based on:1991
Percent to total..... 44.97 % , Cumulative: 44.97 %



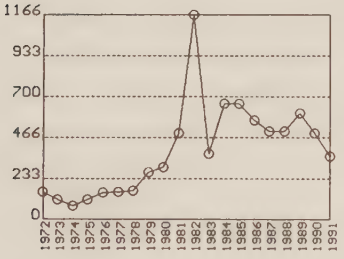
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 11.02 %
Rank..... 2 of 8 based on:1991
Percent to total..... 31.63 % , Cumulative: 76.60 %



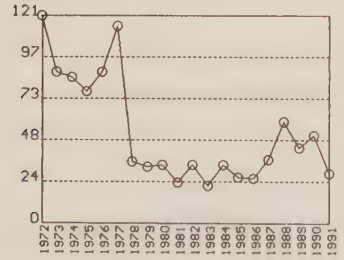
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... -3.69 %
Rank..... 3 of 8 based on:1991
Percent to total..... 16.57 % , Cumulative: 93.17 %



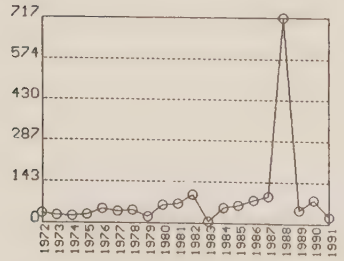
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 22.42 %
Rank..... 4 of 8 based on:1991
Percent to total..... 5.67 % , Cumulative: 98.84 %



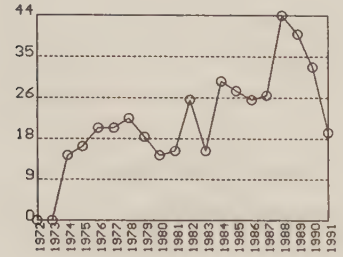
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Spinous spider crab
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 9 %
Trend index.....-20.91 %
Rank..... 5 of 8 based on:1991
Percent to total..... 0.45 % , Cumulative: 99.30 %



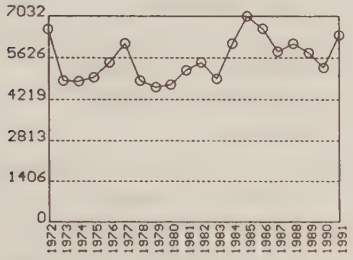
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 31.39 %
Rank..... 6 of 8 based on:1991
Percent to total..... 0.41 % , Cumulative: 99.70 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 21.45 %
Rank..... 7 of 8 based on:1991
Percent to total..... 0.30 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 2.77 %
Rank..... 8 of 8 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

5.3 Molluscs

Table 5.3.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	52559	47.2 %	Rising
Striped venus	2	25416	22.8 %	Stable (+)
Carpet shells nei	3	16000	14.4 %	Sharp rise
Common cuttlefish	4	5949	5.3 %	Stable (-)
Marine molluscs nei	5	4318	3.9 %	Rising
European flying squid	6	2860	2.6 %	Rising
Common octopus	7	2137	1.9 %	Stable (-)
Common squids	8	1177	1.1 %	Declining
Horned and musky octopuses	9	927	0.8 %	Rising
European flat oyster	10	45	0.0 %	Rising
TOTAL MOLLUSCS		111388	100.0 %	Rising

Proportion coming from declining catches.....	1.1 %
from stable catches.....	30.1 %
from rising catches.....	68.9 %

Table 5.3.2

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Proportions of producers of molluscs - 1991 ranking

Italy:98.95%, Yugoslav SFR:1.05%.

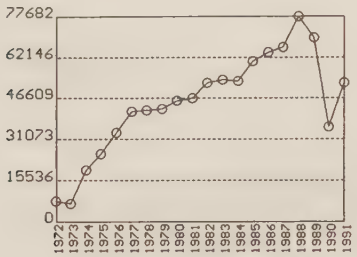
Table 5.3.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.1: Adriatic
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

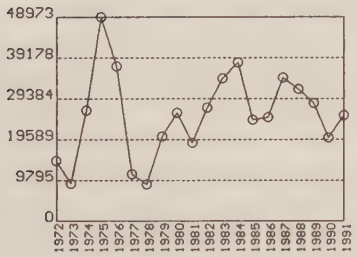
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mediterranean mussel	1	52370	1 49.8%	7799	3 21.0%
Striped venus	2	27231	2 25.9%	14598	1 39.3%
Carpet shells nei	3	0	10 0.0%	0	10 0.0%
Common cuttlefish	4	7380	4 7.0%	8946	2 24.1%
Marine molluscs nei	5	8510	3 8.1%	138	8 0.4%
European flying squid	6	912	9 0.9%	354	7 1.0%
Common octopus	7	1558	6 1.5%	1954	4 5.3%
Common squids	8	1065	7 1.0%	1868	5 5.0%
Horned and musky octopuses	9	1032	8 1.0%	1412	6 3.8%
European flat oyster	10	5082	5 4.8%	85	9 0.2%
TOTALS		105140	100.0%	37154	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



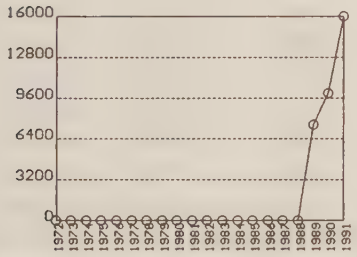
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 18.85 %
Rank..... 1 of 11 based on:1991
Percent to total..... 47.19 % , Cumulative: 47.19 %



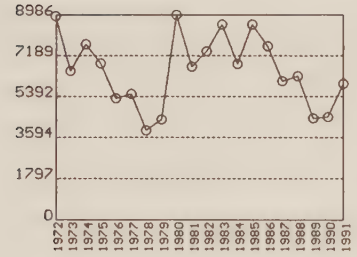
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 4.80 %
Rank..... 2 of 11 based on:1991
Percent to total..... 22.82 % , Cumulative: 70.00 %



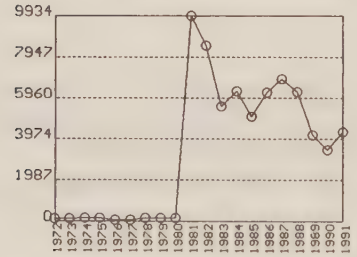
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Carpet shells nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation.....
Trend index..... 83.37 %
Rank..... 3 of 11 based on:1991
Percent to total..... 14.36 % , Cumulative: 84.37 %



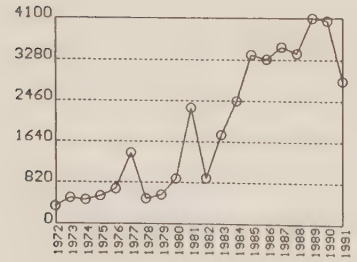
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 20 %
Trend index..... -2.74 %
Rank..... 4 of 11 based on:1991
Percent to total..... 5.34 % , Cumulative: 89.71 %



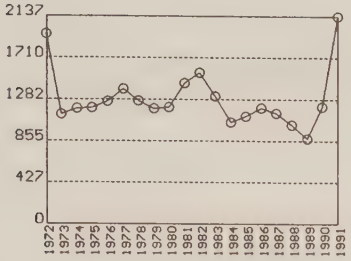
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 34.09 %
Rank..... 5 of 11 based on:1991
Percent to total..... 3.88 % , Cumulative: 93.58 %



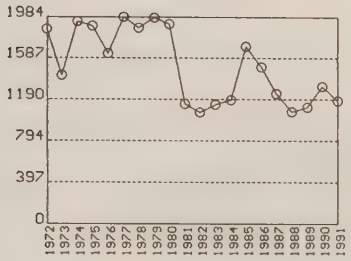
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flying squid
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 34.78 %
Rank..... 6 of 11 based on:1991
Percent to total..... 2.57 % , Cumulative: 96.15 %



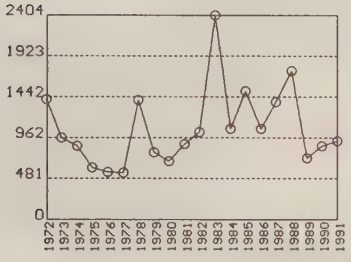
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... -1.22 %
Rank..... 7 of 11 based on:1991
Percent to total..... 1.92 % , Cumulative: 98.07 %



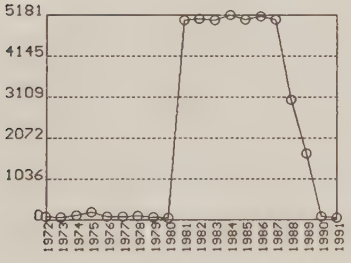
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -8.57 %
Rank..... 8 of 11 based on:1991
Percent to total..... 1.06 % , Cumulative: 99.13 %



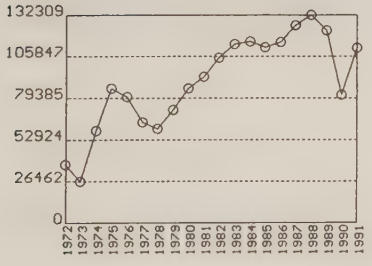
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Horned and musky octopuses
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... 5.08 %
Rank..... 9 of 11 based on:1991
Percent to total..... 0.83 % , Cumulative: 99.96 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flat oyster
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 27.15 %
Rank..... 10 of 11 based on:1991
Percent to total..... 0.04 % , Cumulative:100.00 %



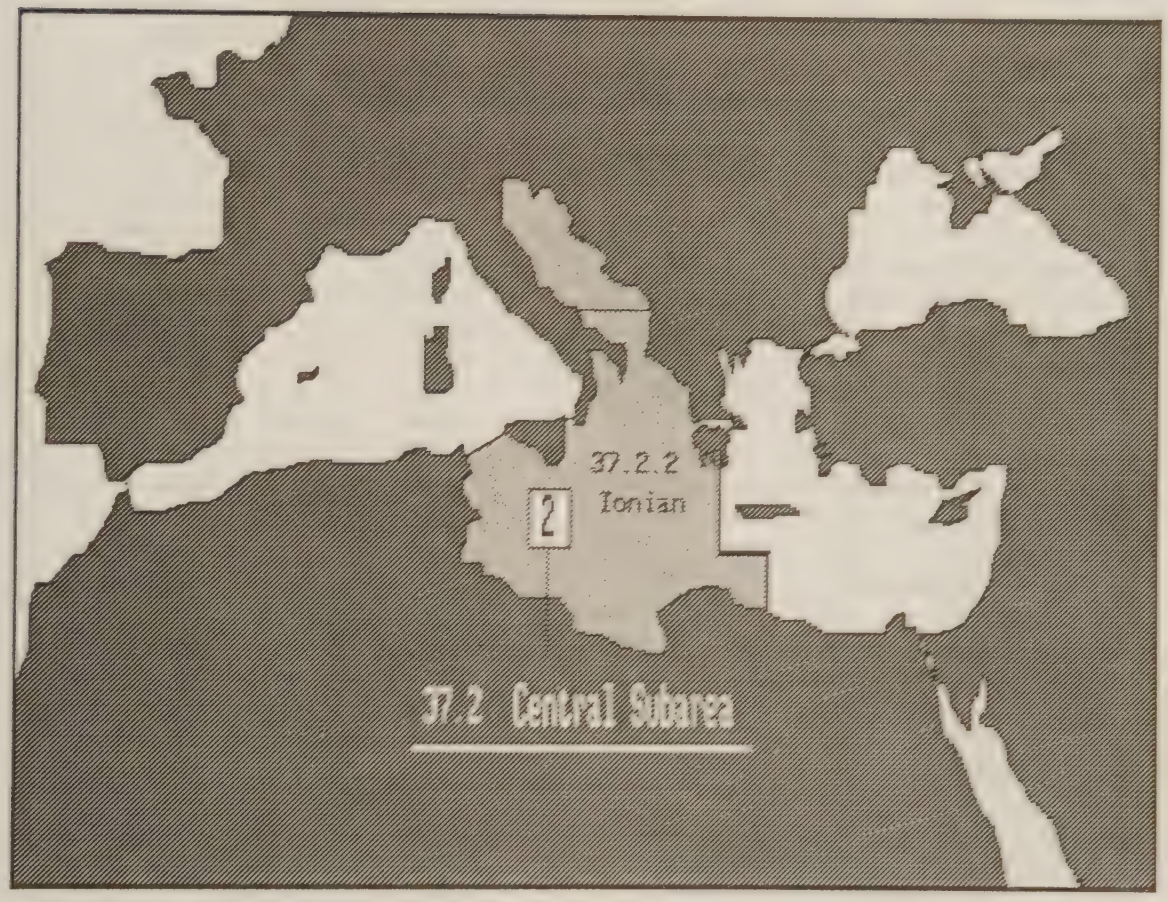
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.2.1 - ADRIATIC
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 14.67 %
Rank..... 11 of 11 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

6. MEDITERRANEAN AND BLACK SEA

37.2: Central Sub-Area

Division 37.2.2 - Ionian



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Italy:63.82%, Tunisia:27.42%, Libya:3.01%, Greece:2.92%, Albania:2.63%, Malta:0.20%.

6.1 Diadromous fish and marine fish.

Table 6.1.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine fishes nei	1	35712	22.2 %	Rising
European pilchard(=Sardine)	2	19854	12.3 %	Rising
European hake	3	19647	12.2 %	Rising
Sardinellas nei	4	15364	9.6 %	Rising
Surmullets(=Red mullets)	5	6209	3.9 %	Stable (+)
Jack and horse mackerels nei	6	6116	3.8 %	Rising
Smoothhounds	7	4952	3.1 %	Rising
Bogue	8	4803	3.0 %	Stable (-)
Common sole	9	4232	2.6 %	Rising
Scorpionfishes, nei	10	3988	2.5 %	Rising
Flathead grey mullet	11	3406	2.1 %	Rising
Porgies, seabreams, nei	12	3058	1.9 %	Rising
Skates and rays, nei	13	2990	1.9 %	Rising
Picarels	14	2750	1.7 %	Declining
European anchovy	15	2669	1.7 %	Declining
Pandoras nei	16	2412	1.5 %	Rising
Groupers nei	17	2396	1.5 %	Rising
Anglerfishes nei	18	2262	1.4 %	Rising
Common dentex	19	2129	1.3 %	Rising
'Scomber' mackerels nei	20	1622	1.0 %	Stable (-)
Red mullet	21	1505	0.9 %	Rising
Mullets nei	22	1394	0.9 %	Stable (+)
OTHER DIADROMOUS AND MARINE	23	11489	7.1 %	Rising
DIADROMOUS AND MARINE - TOTAL		160959	100.0 %	Rising

Proportion coming from declining catches.....	3.4 %
from stable catches.....	8.7 %
from rising catches.....	87.9 %

Table 6.1.2

MEDITERRANEAN AND BLACK SEA - 37.2.2: Ionian
Proportions of producers of diadromous and marine fish - 1991 ranking

Italy:52.93%, Tunisia:33.66%, Libya:4.72%, Greece:4.40%, Albania:3.99%, Malta:0.31%.

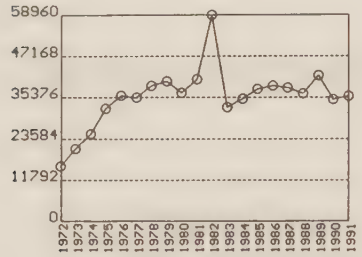
Table 6.1.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

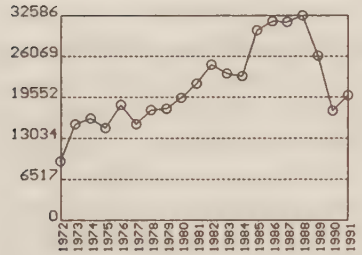
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Marine fishes nei	1	58960	1 39.3%	15883	1 24.8%
European pilchard(=Sardine)	2	24761	2 16.5%	9422	2 14.7%
European hake	3	3247	9 2.2%	2543	8 4.0%
Sardinellas nei	4	6757	4 4.5%	4276	4 6.7%
Surmullets(=Red mullets)	5	5382	6 3.6%	2695	7 4.2%
Jack and horse mackerels nei	6	3289	8 2.2%	2251	10 3.5%
Smoothhounds	7	1405	16 0.9%	1086	13 1.7%
Bogue	8	3886	7 2.6%	4408	3 6.9%
Common sole	9	934	19 0.6%	273	26 0.4%
Scorpionfishes, nei	10	1368	17 0.9%	558	20 0.9%
Flathead grey mullet	11	796	23 0.5%	0	80 0.0%
Porgies, seabreams, nei	12	2657	11 1.8%	1036	14 1.6%
Skates and rays, nei	13	694	24 0.5%	1205	12 1.9%
Picarels	14	2914	10 1.9%	2756	6 4.3%
European anchovy	15	9261	3 6.2%	3440	5 5.4%
Pandoras nei	16	2370	12 1.6%	655	17 1.0%
Groupers nei	17	826	22 0.6%	826	15 1.3%
Anglerfishes nei	18	1290	18 0.9%	313	25 0.5%
Common dentex	19	430	29 0.3%	236	27 0.4%
'Scomber' mackerels nei	20	5399	5 3.6%	805	16 1.3%
Red mullet	21	91	42 0.1%	482	22 0.8%
Mullets nei	22	1499	14 1.0%	1955	11 3.1%
TOTALS		149958	100.0%	64089	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



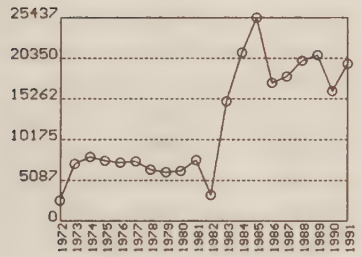
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 6.36 %
Rank..... 1 of 24 based on:1991
Percent to total..... 22.19 % , Cumulative: 22.19 %



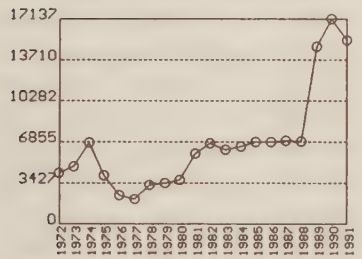
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 11.63 %
Rank..... 2 of 24 based on:1991
Percent to total..... 12.33 % , Cumulative: 34.52 %



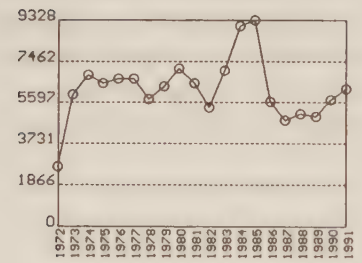
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 24.80 %
Rank..... 3 of 24 based on:1991
Percent to total..... 12.21 % , Cumulative: 46.73 %



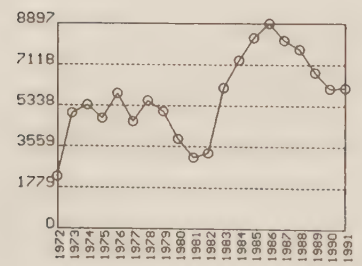
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sardinellas nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 25.32 %
Rank..... 4 of 24 based on:1991
Percent to total..... 9.55 % , Cumulative: 56.27 %



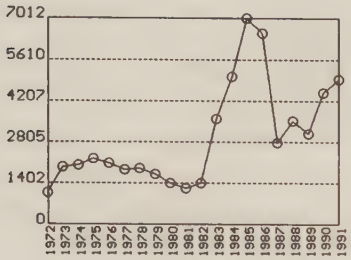
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 0.89 %
Rank..... 5 of 24 based on:1991
Percent to total..... 3.86 % , Cumulative: 60.13 %



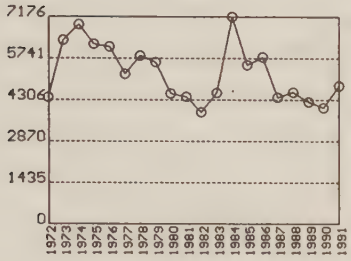
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Jack and horse mackerels nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 10.53 %
Rank..... 6 of 24 based on:1991
Percent to total..... 3.80 % , Cumulative: 63.93 %



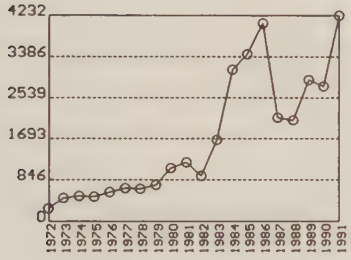
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Smoothhounds
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 20.52 %
Rank..... 7 of 24 based on:1991
Percent to total..... 3.08 % , Cumulative: 67.01 %



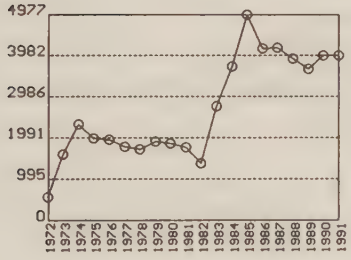
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -4.66 %
Rank..... 8 of 24 based on:1991
Percent to total..... 2.98 % , Cumulative: 69.99 %



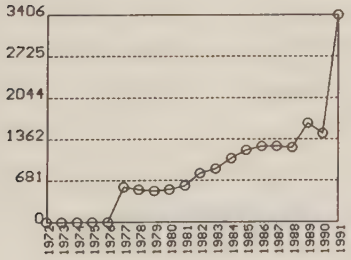
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 35.03 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.63 % , Cumulative: 72.62 %



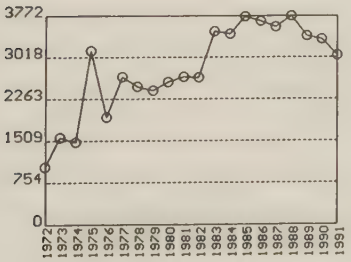
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Scorpionfishes, nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 20.36 %
Rank..... 10 of 24 based on:1991
Percent to total..... 2.48 % , Cumulative: 75.10 %



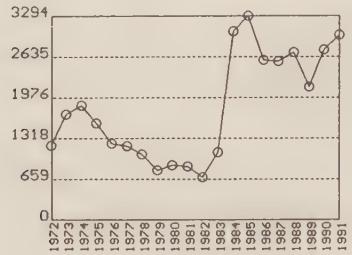
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Flathead grey mullet
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 44.56 %
Rank..... 11 of 24 based on:1991
Percent to total..... 2.12 % , Cumulative: 77.21 %



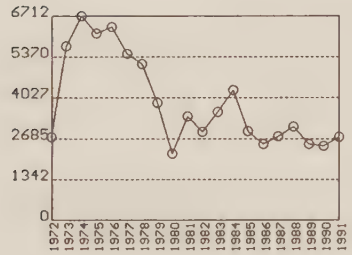
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Porgies, seabreams, nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 12.70 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.90 % , Cumulative: 79.11 %



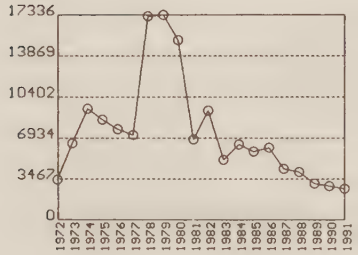
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Skates and rays, nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 16.46 %
Rank..... 13 of 24 based on:1991
Percent to total..... 1.86 % , Cumulative: 80.97 %



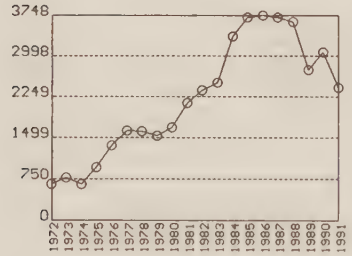
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index.....-14.36 %
Rank..... 14 of 24 based on:1991
Percent to total..... 1.71 % , Cumulative: 82.68 %



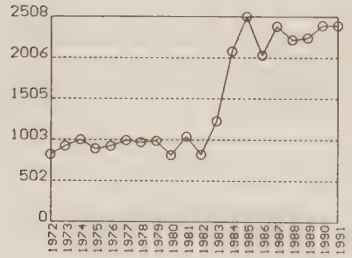
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index.....-13.97 %
Rank..... 15 of 24 based on:1991
Percent to total..... 1.66 % , Cumulative: 84.34 %



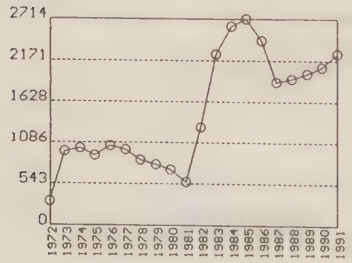
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Pandoras nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 22.56 %
Rank..... 16 of 24 based on:1991
Percent to total..... 1.50 % , Cumulative: 85.84 %



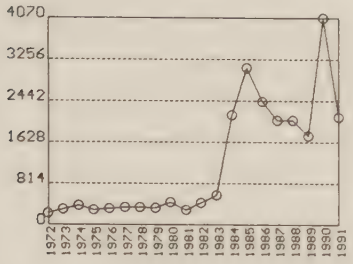
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Groupers nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 21.40 %
Rank..... 17 of 24 based on:1991
Percent to total..... 1.49 % , Cumulative: 87.33 %



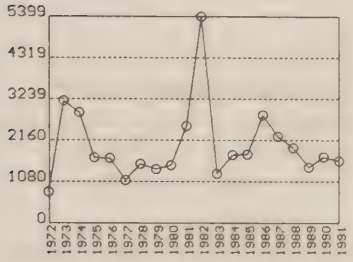
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Anglerfishes nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 21.45 %
Rank..... 18 of 24 based on:1991
Percent to total..... 1.41 % , Cumulative: 88.73 %



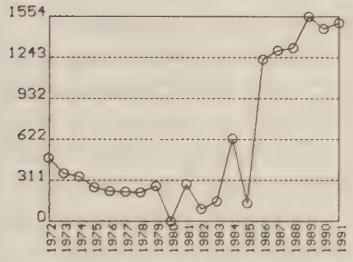
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common dentex
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 41.65 %
Rank..... 19 of 24 based on:1991
Percent to total..... 1.32 % , Cumulative: 90.05 %



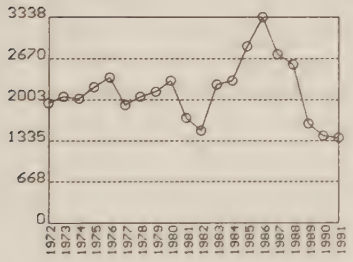
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....'Scomber' mackerels nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... -0.02 %
Rank..... 20 of 24 based on:1991
Percent to total..... 1.01 % , Cumulative: 91.06 %



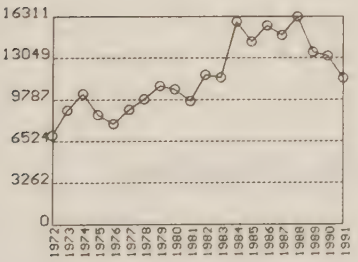
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red mullet
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 36.52 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.94 % , Cumulative: 92.00 %



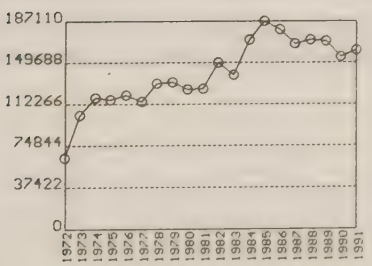
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 0.03 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.87 % , Cumulative: 92.86 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 10.36 %
Rank..... 23 of 24 based on:1991
Percent to total..... 7.11 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE - TOTAL
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 10.10 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

6.2 Crustaceans

Table 6.2.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	17040	68.0 %	Rising
Norway lobster	2	3607	14.4 %	Rising
Marine crustaceans nei	3	2471	9.9 %	Rising
Caramote prawn	4	1044	4.2 %	Rising
Mantis squillid	5	700	2.8 %	Stable (-)
Palinurid spiny lobsters nei	6	132	0.5 %	Stable (-)
European lobster	7	51	0.2 %	Sharp rise
Mediterranean shore crab	8	1	0.0 %	Sharp rise
Deepwater rose shrimp	9	0	0.0 %	Sharp rise
TOTAL CRUSTACEANS		25046	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	3.3 %
from rising catches.....	96.7 %

Table 6.2.2

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Proportions of producers of crustaceans - 1991 ranking

Italy:91.72%, Tunisia:8.00%, Greece:0.26%, Malta:0.02%.

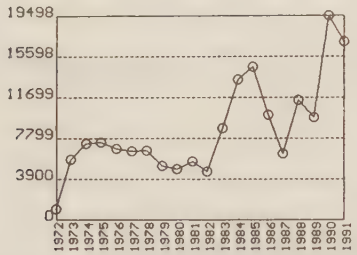
Table 6.2.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

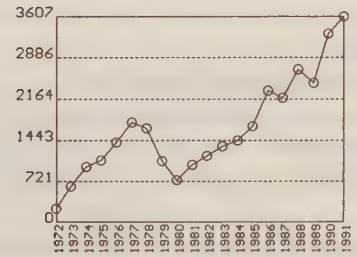
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	4615	1 50.0%	1048	1 38.0%
Norway lobster	2	1176	3 12.8%	239	5 8.7%
Marine crustaceans nei	3	353	5 3.8%	244	4 8.9%
Caramote prawn	4	1899	2 20.6%	720	2 26.1%
Mantis squillid	5	908	4 9.8%	441	3 16.0%
Palinurid spiny lobsters nei	6	268	6 2.9%	66	6 2.4%
European lobster	7	4	7 0.0%	0	7 0.0%
Mediterranean shore crab	8	0	8 0.0%	0	8 0.0%
Deepwater rose shrimp	9	0	9 0.0%	0	9 0.0%
TOTALS		9223	100.0%	2758	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



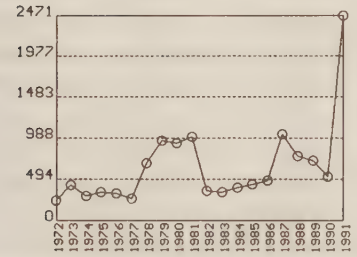
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 20.92 %
Rank..... 1 of 10 based on:1991
Percent to total..... 68.03 % , Cumulative: 68.03 %



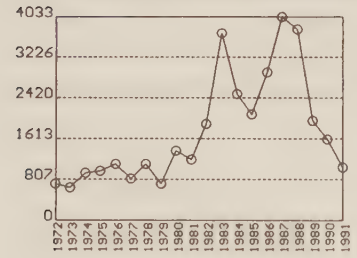
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 24.61 %
Rank..... 2 of 10 based on:1991
Percent to total..... 14.40 % , Cumulative: 82.44 %



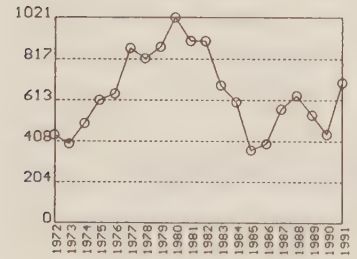
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 21.58 %
Rank..... 3 of 10 based on:1991
Percent to total..... 9.87 % , Cumulative: 92.30 %



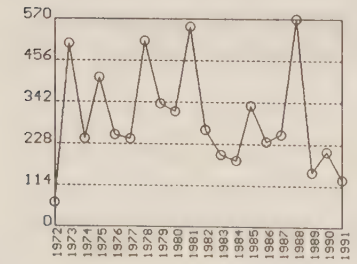
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 20.21 %
Rank..... 4 of 10 based on:1991
Percent to total..... 4.17 % , Cumulative: 96.47 %



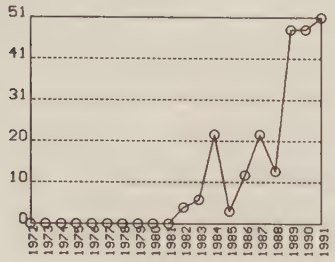
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -1.49 %
Rank..... 5 of 10 based on:1991
Percent to total..... 2.79 % , Cumulative: 99.27 %



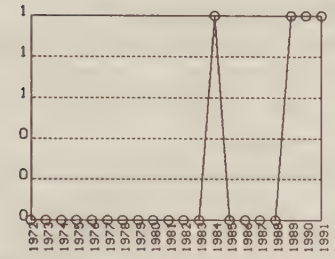
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 26 %
Trend index..... -4.56 %
Rank..... 6 of 10 based on:1991
Percent to total..... 0.53 % , Cumulative: 99.79 %



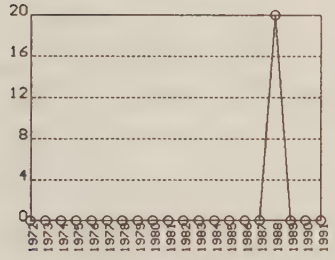
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 66.06 %
Rank..... 7 of 10 based on:1991
Percent to total..... 0.20 % , Cumulative:100.00 %



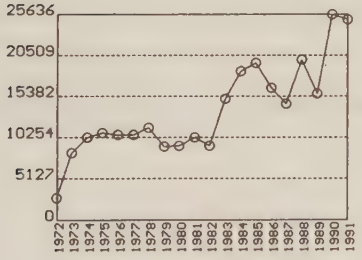
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean shore crab
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 66.67 %
Rank..... 8 of 10 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Deepwater rose shrimp
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 61.91 %
Rank..... 9 of 10 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 19.73 %
Rank..... 10 of 10 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

6.3 Molluscs

Table 6.3.1

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	32069	48.5 %	Rising
Common cuttlefish	2	8671	13.1 %	Rising
Octopuses	3	6281	9.5 %	Rising
Common octopus	4	6150	9.3 %	Rising
Marine molluscs nei	5	3783	5.7 %	Rising
European flying squid	6	3521	5.3 %	Rising
Common squids	7	3270	4.9 %	Rising
Horned and musky octopuses	8	1553	2.4 %	Stable (-)
Striped venus	9	875	1.3 %	Declining
Squids nei	10	10	0.0 %	Declining
Cuttlefishes, bobtail squids	11	2	0.0 %	Rising
Cephalopods nei	12	0	0.0 %	Sharp decl
TOTAL MOLLUSCS		66185	100.0 %	Rising

Proportion coming from declining catches.....	1.3 %
from stable catches.....	2.4 %
from rising catches.....	96.3 %

Table 6.3.2

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Proportions of producers of molluscs - 1991 ranking

Italy:79.77%, Tunisia:19.58%, Greece:0.34%, Albania:0.30%, Malta:0.01%.

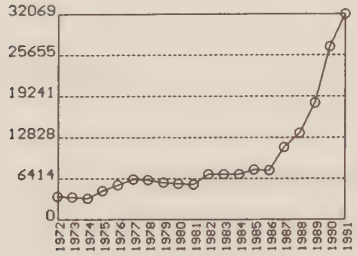
Table 6.3.3

MEDITERRANEAN AND BLACK SEA - Central Sub-Area

Division 37.2.2: Ionian
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

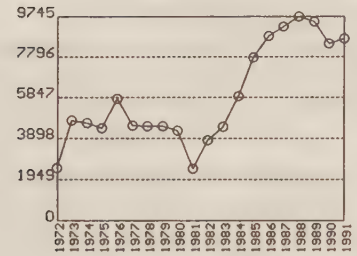
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Mediterranean mussel	1	7095	1 25.3%	3628	1 27.5%
Common cuttlefish	2	3804	3 13.6%	2495	2 18.9%
Octopuses	3	2222	5 7.9%	240	9 1.8%
Common octopus	4	5461	2 19.5%	2095	3 15.9%
Marine molluscs nei	5	1957	6 7.0%	1	11 0.0%
European flying squid	6	1539	8 5.5%	382	8 2.9%
Common squids	7	1912	7 6.8%	705	6 5.4%
Horned and musky octopuses	8	990	9 3.5%	578	7 4.4%
Striped venus	9	2987	4 10.7%	1379	5 10.5%
Squids nei	10	52	10 0.2%	32	10 0.2%
Cuttlefishes, bobtail squids	11	8	11 0.0%	0	12 0.0%
Cephalopods nei	12	0	12 0.0%	1646	4 12.5%
TOTALS		28027	100.0%	13181	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



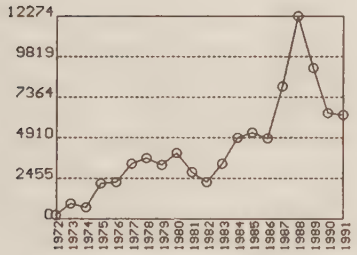
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 34.83 %
Rank..... 1 of 12 based on:1991
Percent to total..... 48.45 % , Cumulative: 48.45 %



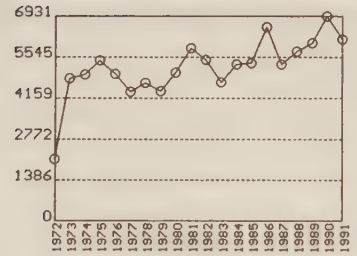
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 17.33 %
Rank..... 2 of 12 based on:1991
Percent to total..... 13.10 % , Cumulative: 61.55 %



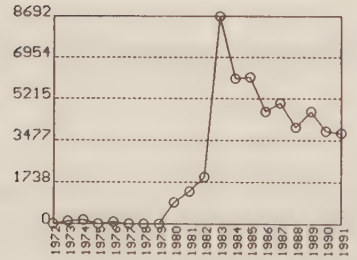
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 31.04 %
Rank..... 3 of 12 based on:1991
Percent to total..... 9.49 % , Cumulative: 71.04 %



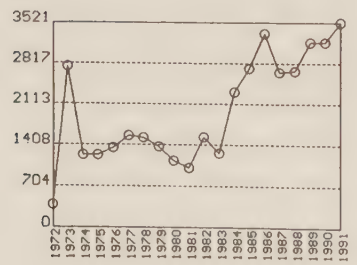
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 7.50 %
Rank..... 4 of 12 based on:1991
Percent to total..... 9.29 % , Cumulative: 80.34 %



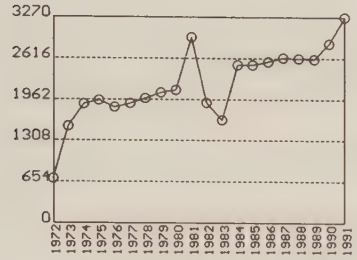
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 41.53 %
Rank..... 5 of 12 based on:1991
Percent to total..... 5.72 % , Cumulative: 86.05 %



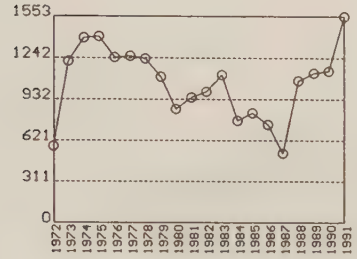
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flying squid
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 18.97 %
Rank..... 6 of 12 based on:1991
Percent to total..... 5.32 % , Cumulative: 91.37 %



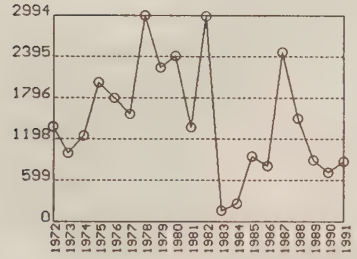
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 11.72 %
Rank..... 7 of 12 based on:1991
Percent to total..... 4.94 % , Cumulative: 96.31 %



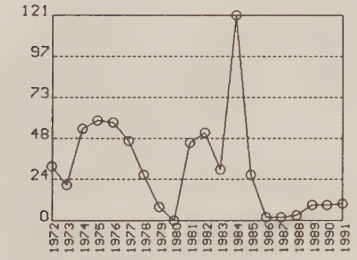
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Horned and musky octopuses
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -1.63 %
Rank..... 8 of 12 based on:1991
Percent to total..... 2.35 % , Cumulative: 98.66 %



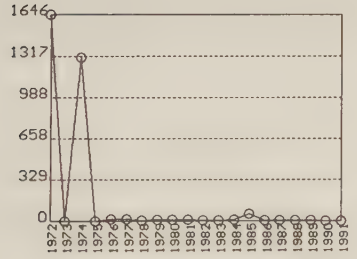
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 23 %
Trend index..... -8.87 %
Rank..... 9 of 12 based on:1991
Percent to total..... 1.32 % , Cumulative: 99.98 %



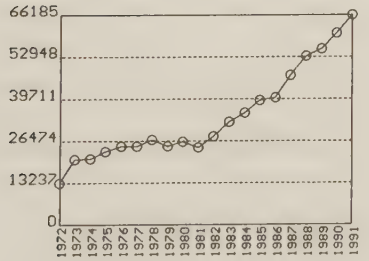
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Squids nei
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 10 %
Trend index.....-18.41 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.02 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER MOLLUSCS
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 12 %
Trend index.....-77.03 %
Rank.....
.....



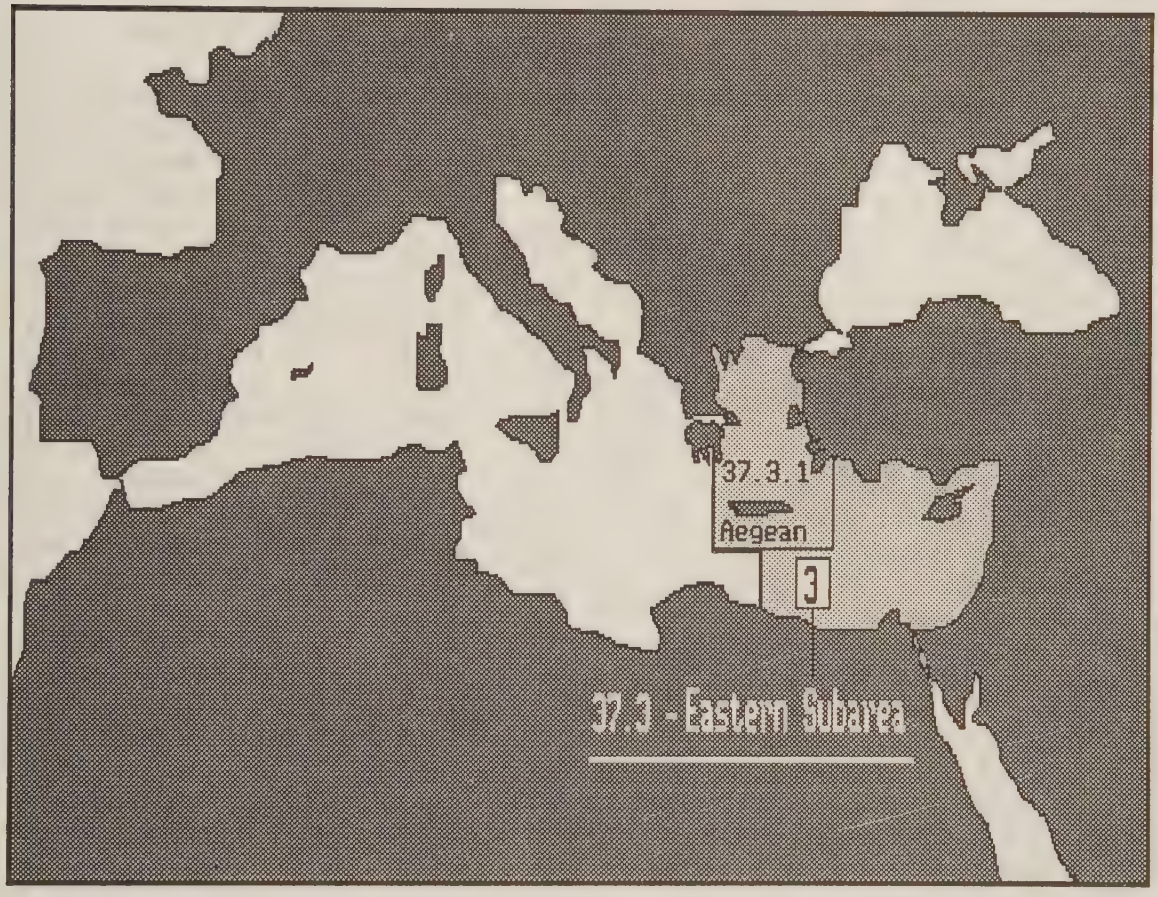
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.2.2 - IONIAN
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 21.74 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

7. MEDITERRANEAN AND BLACK SEA

37.3: Eastern Sub-Area

Division 37.3.1 - Aegean



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Greece:70.72%, Turkey:29.28%.

7.1 Diadromous fish and marine fish.

Table 7.1.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European pilchard(=Sardine)	1	25635	18.6 %	Rising
European anchovy	2	17422	12.6 %	Rising
Marine fishes nei	3	11492	8.3 %	Stable (+)
Bogue	4	10896	7.9 %	Rising
Picarels	5	9708	7.0 %	Stable (+)
Chub mackerel	6	8059	5.9 %	Rising
Mediterranean horse mackerel	7	7142	5.2 %	Rising
Mullets nei	8	6436	4.7 %	Rising
European hake	9	4045	2.9 %	Sharp rise
Flathead grey mullet	10	2844	2.1 %	Sharp rise
Red mullet	11	2703	2.0 %	Rising
Blue whiting(=Poutassou)	12	2222	1.6 %	Stable (-)
Surmullets(=Red mullets)	13	2156	1.6 %	Sharp rise
Gurnards, searobins nei	14	2100	1.5 %	Sharp rise
Common sole	15	1768	1.3 %	Rising
Striped mullet	16	1760	1.3 %	Rising
Salema (=Strepie)	17	1665	1.2 %	Sharp rise
Saddled seabream	18	1636	1.2 %	Sharp rise
Gilthead seabream	19	1434	1.0 %	Rising
Atlantic horse mackerel	20	1324	1.0 %	Rising
'Scomber' mackerels nei	21	1262	0.9 %	Sharp rise
Scorpionfishes, nei	22	1088	0.8 %	Stable (-)
OTHER DIADROMOUS AND MARINE	23	13076	9.5 %	Rising
DIADROMOUS AND MARINE - TOTAL		137873	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	17.8 %
from rising catches.....	82.2 %

Table 7.1.2

MEDITERRANEAN AND BLACK SEA - 37.3.1: Aegean
Proportions of producers of diadromous and marine fish - 1991 ranking

Greece:68.94%, Turkey:31.06%.

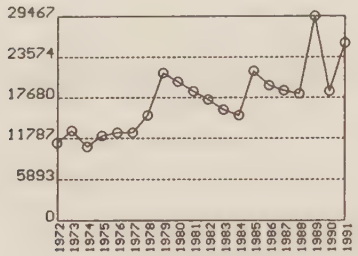
Table 7.1.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

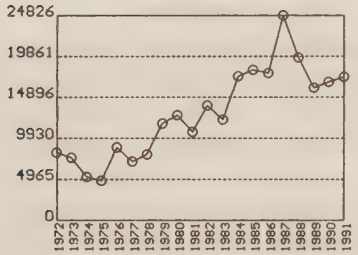
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-		CATCH (MT) -1972-	RANK AND PERCENT -1972-	
European pilchard(=Sardine)	1	17427	1	21.2%	11169	1	22.8%
European anchovy	2	13872	2	16.8%	8202	2	16.8%
Marine fishes nei	3	6288	6	7.6%	7275	3	14.9%
Bogue	4	6932	5	8.4%	2955	5	6.0%
Picarels	5	7448	3	9.0%	6907	4	14.1%
Chub mackerel	6	3390	7	4.1%	849	11	1.7%
Mediterranean horse mackerel	7	7097	4	8.6%	0	39	0.0%
Mullets nei	8	926	13	1.1%	1540	8	3.2%
European hake	9	1885	8	2.3%	0	68	0.0%
Flathead grey mullet	10	1734	10	2.1%	0	49	0.0%
Red mullet	11	1192	12	1.5%	1772	7	3.6%
Blue whiting(=Poutassou)	12	756	15	0.9%	1455	9	3.0%
Surmullets(=Red mullets)	13	1216	11	1.5%	0	46	0.0%
Gurnards, searobins nei	14	478	22	0.6%	0	57	0.0%
Common sole	15	753	16	0.9%	619	12	1.3%
Striped mullet	16	590	19	0.7%	0	60	0.0%
Salema (=Strepie)	17	169	34	0.2%	0	40	0.0%
Saddled seabream	18	516	20	0.6%	26	30	0.1%
Gilthead seabream	19	352	26	0.4%	304	14	0.6%
Atlantic horse mackerel	20	1740	9	2.1%	145	20	0.3%
'Scomber' mackerels nei	21	229	30	0.3%	0	53	0.0%
Scorpionfishes, nei	22	507	21	0.6%	1035	10	2.1%
TOTALS		82365		100.0%	48893		100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



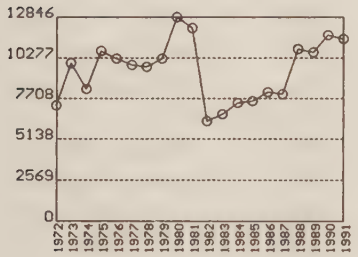
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 11.84 %
Rank..... 1 of 24 based on:1991
Percent to total..... 18.59 % , Cumulative: 18.59 %



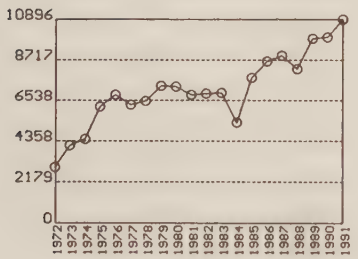
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 19.43 %
Rank..... 2 of 24 based on:1991
Percent to total..... 12.64 % , Cumulative: 31.23 %



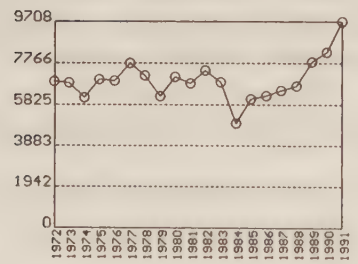
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 1.30 %
Rank..... 3 of 24 based on:1991
Percent to total..... 8.34 % , Cumulative: 39.56 %



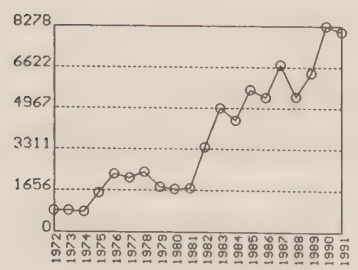
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 13.37 %
Rank..... 4 of 24 based on:1991
Percent to total..... 7.90 % , Cumulative: 47.47 %



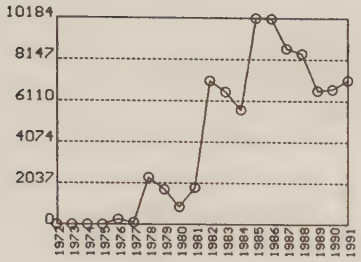
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 2.26 %
Rank..... 5 of 24 based on:1991
Percent to total..... 7.04 % , Cumulative: 54.51 %



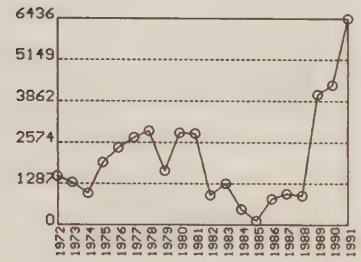
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Chub mackerel
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 33.26 %
Rank..... 6 of 24 based on:1991
Percent to total..... 5.85 % , Cumulative: 60.35 %



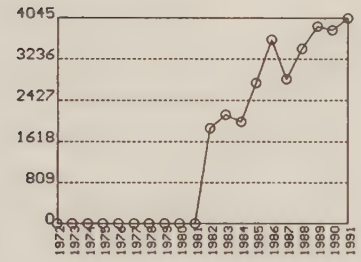
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean horse mackerel
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 41.69 %
Rank..... 7 of 24 based on:1991
Percent to total..... 5.18 % , Cumulative: 65.53 %



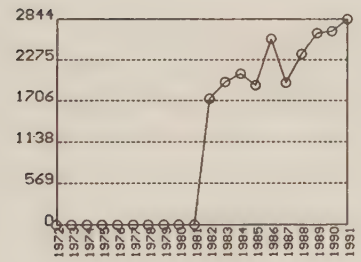
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 12.70 %
Rank..... 8 of 24 based on:1991
Percent to total..... 4.67 % , Cumulative: 70.20 %



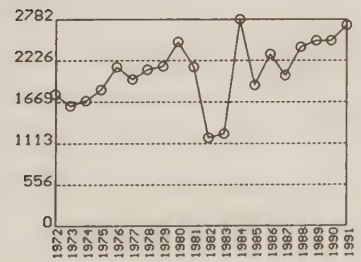
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European hake
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 54.11 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.93 % , Cumulative: 73.14 %



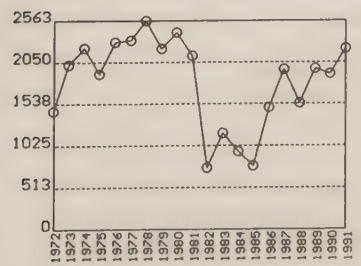
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Flathead grey mullet
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 51.49 %
Rank..... 10 of 24 based on:1991
Percent to total..... 2.06 % , Cumulative: 75.20 %



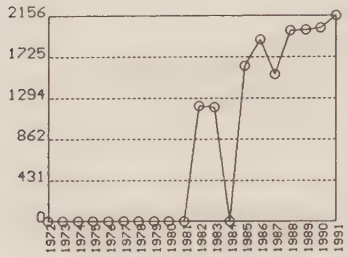
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red mullet
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 5.87 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.96 % , Cumulative: 77.16 %



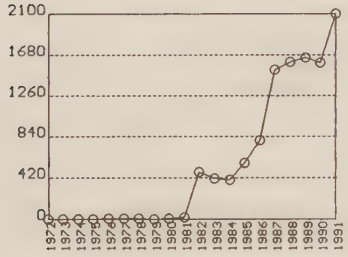
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Blue whiting(=Poutassou)
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... -4.05 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.61 % , Cumulative: 78.77 %



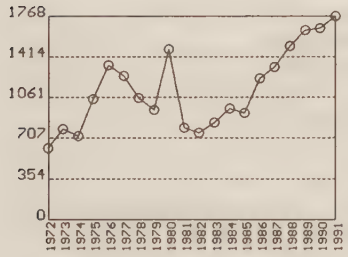
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 55.21 %
Rank..... 13 of 24 based on:1991
Percent to total..... 1.56 % , Cumulative: 80.33 %



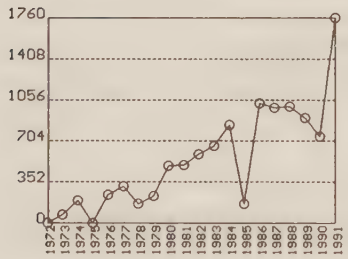
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gurnards, searobins nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 61.34 %
Rank..... 14 of 24 based on:1991
Percent to total..... 1.52 % , Cumulative: 81.86 %



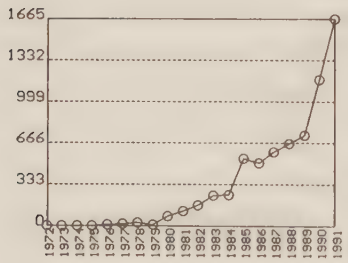
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common sole
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 11.22 %
Rank..... 15 of 24 based on:1991
Percent to total..... 1.28 % , Cumulative: 83.14 %



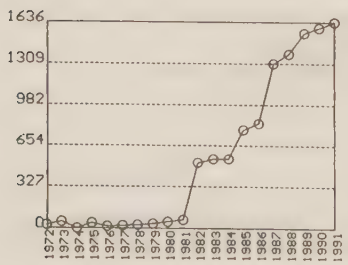
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped mullet
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 37.98 %
Rank..... 16 of 24 based on:1991
Percent to total..... 1.28 % , Cumulative: 84.42 %



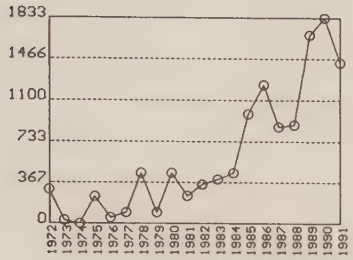
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Salema (=Strepie)
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 61.15 %
Rank..... 17 of 24 based on:1991
Percent to total..... 1.21 % , Cumulative: 85.62 %



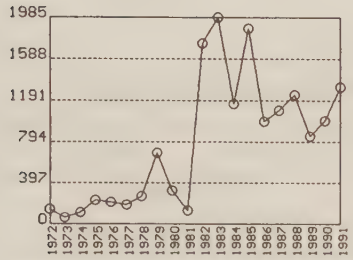
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Saddled seabream
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 0 %
Trend index..... 55.58 %
Rank..... 18 of 24 based on:1991
Percent to total..... 1.19 % , Cumulative: 86.81 %



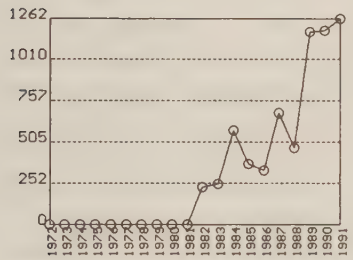
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gilthead seabream
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 43.37 %
Rank..... 19 of 24 based on:1991
Percent to total..... 1.04 % , Cumulative: 87.85 %



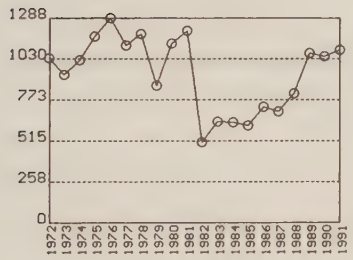
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic horse mackerel
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 30.43 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.96 % , Cumulative: 88.81 %



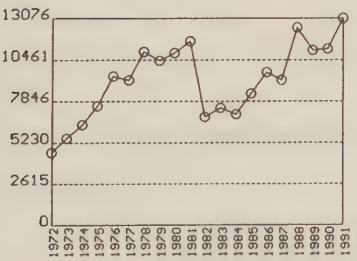
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....'Scomber' mackerels nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 61.83 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.92 % , Cumulative: 89.73 %



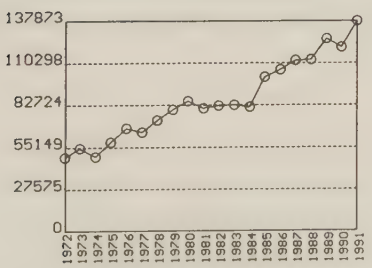
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Scorpionfishes, nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 15 %
Trend index..... -4.63 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.79 % , Cumulative: 90.52 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 8.88 %
Rank..... 23 of 24 based on:1991
Percent to total..... 9.48 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE - TOTAL
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 15.81 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

7.2 Crustaceans

Table 7.2.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	1424	44.4 %	Rising
Norway lobster	2	1257	39.2 %	Sharp rise
Caramote prawn	3	256	8.0 %	Sharp rise
European lobster	4	172	5.4 %	Sharp rise
Mediterranean shore crab	5	98	3.1 %	Sharp rise
Palinurid spiny lobsters nei	6	3	0.1 %	Rising
Marine crabs nei	7	0	0.0 %	Rising
Marine crustaceans nei	8	0	0.0 %	Declining
TOTAL CRUSTACEANS		3210	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 7.2.2

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Proportions of producers of crustaceans - 1991 ranking

Greece:94.89%, Turkey:5.11%.

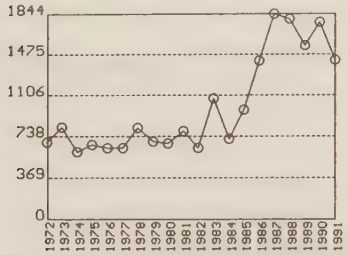
Table 7.2.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

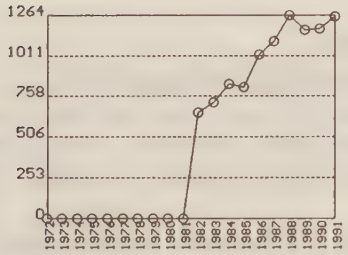
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	633	2 39.2%	686	1 56.2%
Norway lobster	2	656	1 40.6%	0	7 0.0%
Caramote prawn	3	192	3 11.9%	0	3 0.0%
European lobster	4	96	4 5.9%	0	4 0.0%
Mediterranean shore crab	5	34	5 2.1%	0	8 0.0%
Palinurid spiny lobsters nei	6	3	6 0.2%	0	5 0.0%
Marine crabs nei	7	1	7 0.1%	0	6 0.0%
Marine crustaceans nei	8	0	8 0.0%	534	2 43.8%
TOTALS		1615	100.0%	1220	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



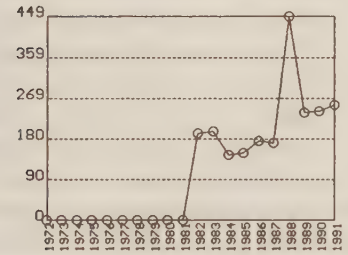
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 19.29 %
Rank..... 1 of 9 based on:1991
Percent to total..... 44.36 % , Cumulative: 44.36 %



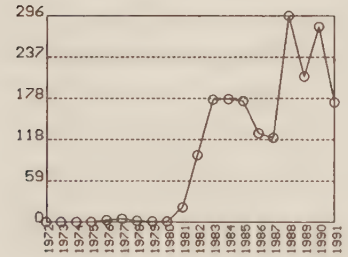
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Norway lobster
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 53.22 %
Rank..... 2 of 9 based on:1991
Percent to total..... 39.16 % , Cumulative: 83.52 %



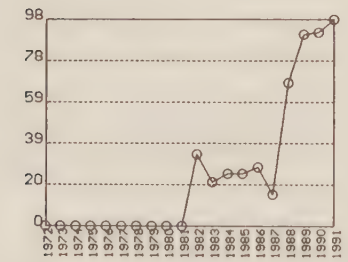
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Caramote prawn
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 52.48 %
Rank..... 3 of 9 based on:1991
Percent to total..... 7.98 % , Cumulative: 91.50 %



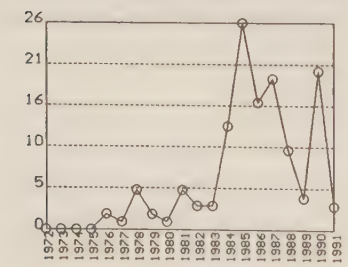
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 51.40 %
Rank..... 4 of 9 based on:1991
Percent to total..... 5.36 % , Cumulative: 96.85 %



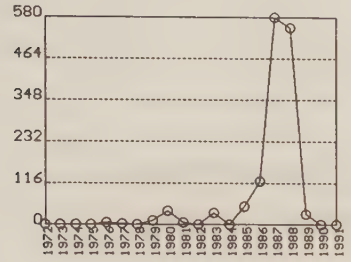
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean shore crab
Area.,.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 62.17 %
Rank..... 5 of 9 based on:1991
Percent to total..... 3.05 % , Cumulative: 99.91 %



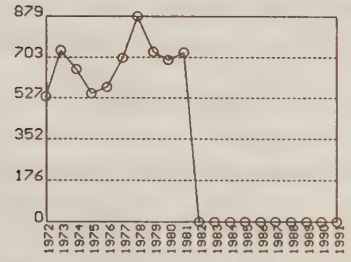
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 39.92 %
Rank..... 6 of 9 based on:1991
Percent to total..... 0.09 % , Cumulative:100.00 %



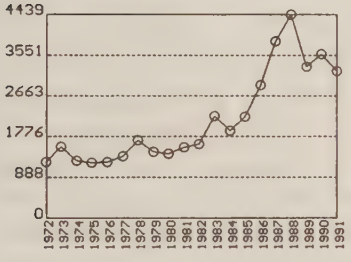
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crabs nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 50.82 %
Rank..... 7 of 9 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index.....-45.55 %
Rank..... 8 of 9 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 21.70 %
Rank..... 9 of 9 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

7.3 Molluscs

Table 7.3.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European flat oyster	1	2190	22.8 %	Sharp rise
Mediterranean mussel	2	1773	18.5 %	Rising
Common cuttlefish	3	1701	17.7 %	Rising
Marine molluscs nei	4	1138	11.9 %	Stable (+)
Common octopus	5	1097	11.4 %	Sharp rise
Common squids	6	981	10.2 %	Rising
Squids nei	7	408	4.3 %	Stable (+)
Octopuses	8	305	3.2 %	Declining
Great scallop	9	0	0.0 %	Rising
Striped venus	10	0	0.0 %	Sharp rise
TOTAL MOLLUSCS		9593	100.0 %	Rising

Proportion coming from declining catches.....	3.2 %
from stable catches.....	16.1 %
from rising catches.....	80.7 %

Table 7.3.2

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Proportions of producers of molluscs - 1991 ranking

Greece:88.17%, Turkey:11.83%.

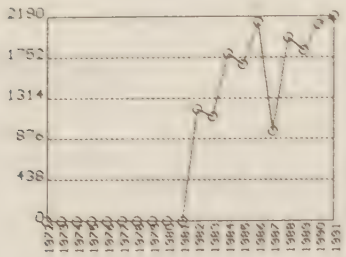
Table 7.3.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.1: Aegean
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

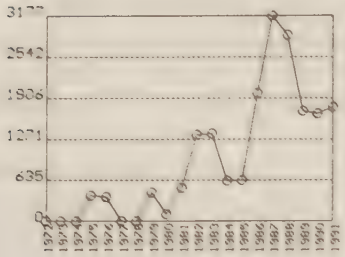
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European flat oyster	1	1202	2 23.6%	0	6 0.0%
Mediterranean mussel	2	1338	1 26.2%	0	7 0.0%
Common cuttlefish	3	479	4 9.4%	325	2 18.1%
Marine molluscs nei	4	332	7 6.5%	309	3 17.2%
Common octopus	5	410	6 8.0%	0	10 0.0%
Common squids	6	446	5 8.7%	201	5 11.2%
Squids nei	7	223	8 4.4%	250	4 13.9%
Octopuses	8	671	3 13.2%	712	1 39.6%
Great scallop	9	0	9 0.0%	0	8 0.0%
Striped venus	10	0	10 0.0%	0	9 0.0%
TOTALS		5101	100.0%	1797	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



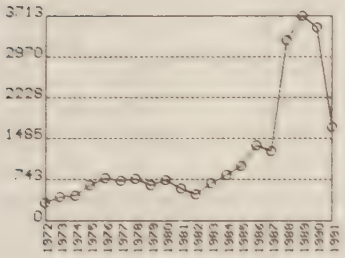
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flat oyster
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 52.01 %
Rank..... 1 of 11 based on:1991
Percent to total..... 22.83 % , Cumulative: 22.83 %



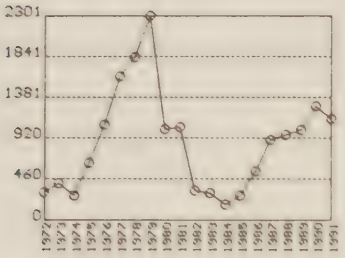
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 44.67 %
Rank..... 2 of 11 based on:1991
Percent to total..... 18.48 % , Cumulative: 41.31 %



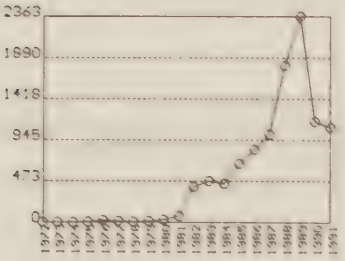
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 34.98 %
Rank..... 3 of 11 based on:1991
Percent to total..... 17.73 % , Cumulative: 59.04 %



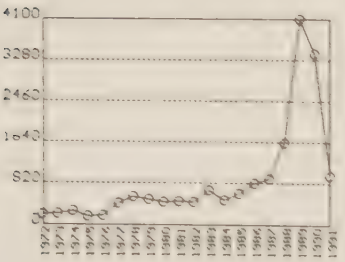
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 2.69 %
Rank..... 4 of 11 based on:1991
Percent to total..... 11.86 % , Cumulative: 70.91 %



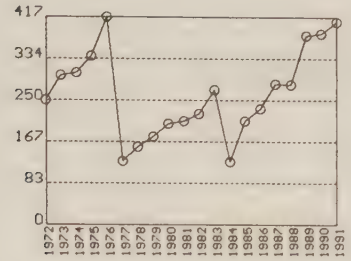
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 57.37 %
Rank..... 5 of 11 based on:1991
Percent to total..... 11.44 % , Cumulative: 82.34 %



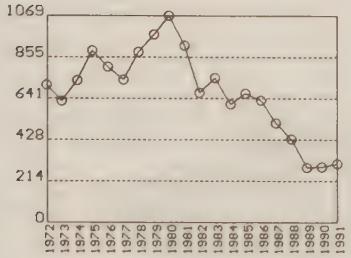
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 42.99 %
Rank..... 6 of 11 based on:1991
Percent to total..... 10.23 % , Cumulative: 92.57 %



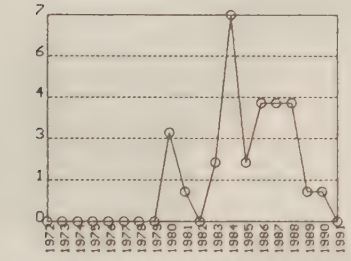
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Squids nei
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 4.19 %
Rank..... 7 of 11 based on:1991
Percent to total..... 4.25 % , Cumulative: 96.82 %



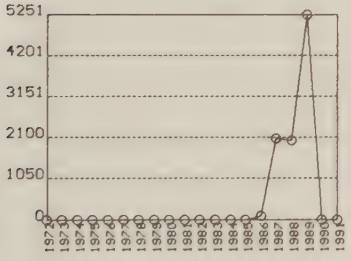
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-12.31 %
Rank..... 8 of 11 based on:1991
Percent to total..... 3.18 % , Cumulative:100.00 %



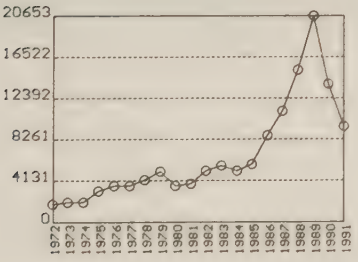
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Great scallop
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 34.32 %
Rank..... 9 of 11 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 64.93 %
Rank..... 10 of 11 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



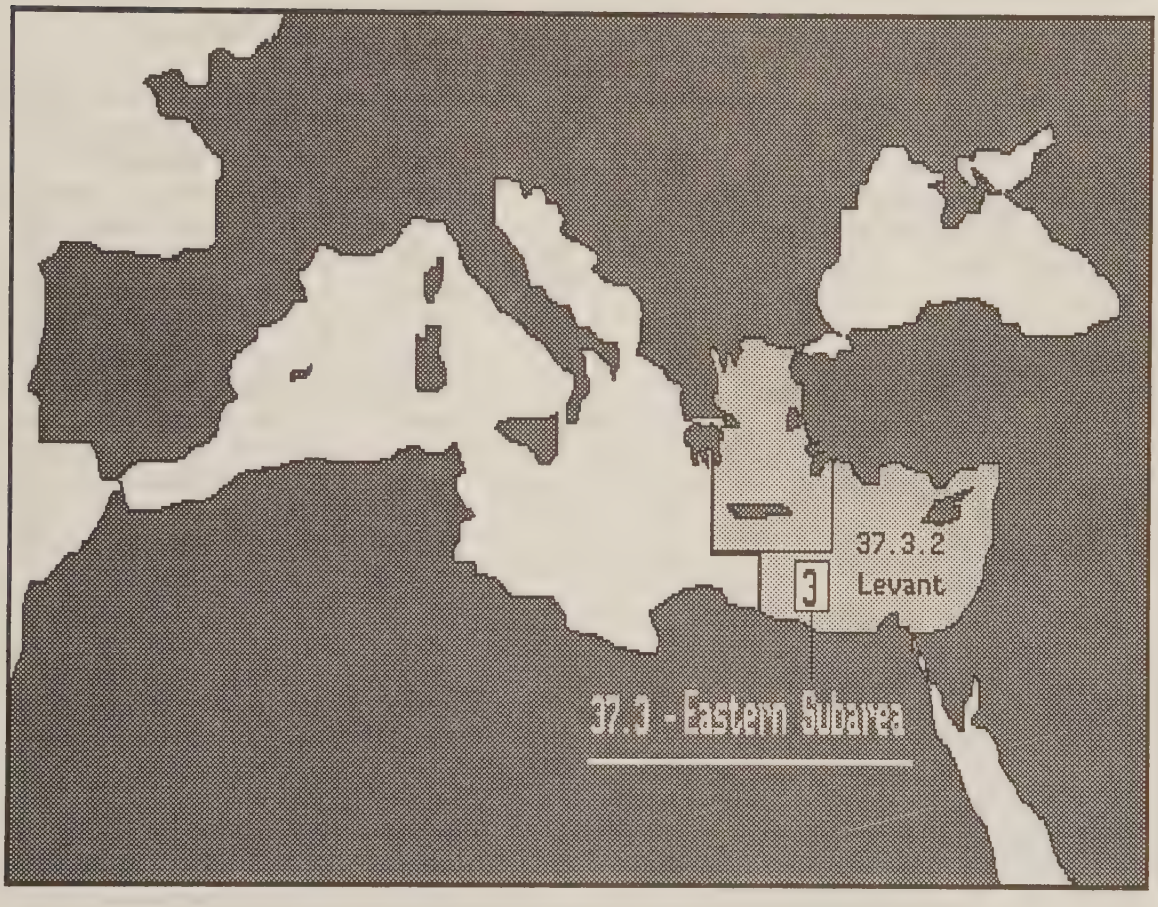
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.3.1 - AEGEAN
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 33.22 %
Rank..... 11 of 11 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

8. MEDITERRANEAN AND BLACK SEA

37.3: Eastern Sub-Area

Division 37.3.2 - Levant



PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Egypt:53.54%, Turkey:34.08%, Israel:4.45%, Cyprus:3.26%, Lebanon:2.10%, Syria:1.88%, Gaza Strip:0.69%, Tunisia:0.00%.

8.1 Diadromous fish and marine fish.

Table 8.1.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Marine fishes nei	1	10389	15.5 %	Rising
Sardinellas nei	2	9701	14.5 %	Rising
Silversides(=Sand smelts)	3	5272	7.9 %	Sharp rise
European pilchard(=Sardine)	4	4747	7.1 %	Rising
Mullets nei	5	3988	6.0 %	Rising
Bogue	6	3178	4.7 %	Rising
Picarels	7	2940	4.4 %	Rising
Chub mackerel	8	2401	3.6 %	Rising
Gurnards, searobins nei	9	1686	2.5 %	Rising
Lizardfishes nei	10	1487	2.2 %	Rising
Gilthead seabream	11	1432	2.1 %	Stable (-)
Striped mullet	12	1354	2.0 %	Rising
Red porgy	13	1181	1.8 %	Rising
Scorpionfishes, nei	14	1122	1.7 %	Sharp rise
Groupers nei	15	978	1.5 %	Rising
Meagre	16	946	1.4 %	Rising
Red mullet	17	896	1.3 %	Rising
Atlantic gobies	18	842	1.3 %	Rising
Barracudas	19	808	1.2 %	Rising
Surmullets(=Red mullets)	20	746	1.1 %	Stable (-)
Porgies, seabreams, nei	21	719	1.1 %	Rising
Sharks, rays, skates, etc	22	695	1.0 %	Rising
OTHER DIADROMOUS AND MARINE	23	9471	14.1 %	Rising
DIADROMOUS AND MARINE - TOTAL		66979	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	3.3 %
from rising catches.....	96.7 %

Table 8.1.2

MEDITERRANEAN AND BLACK SEA - 37.3.2: Levant
Proportions of producers of diadromous and marine fish - 1991 ranking

Egypt:50.86%, Turkey:36.51%, Israel:4.49%, Cyprus:3.18%, Lebanon:2.24%, Syria:1.96%, Gaza Strip:0.76%, Tunisia:0.00%.

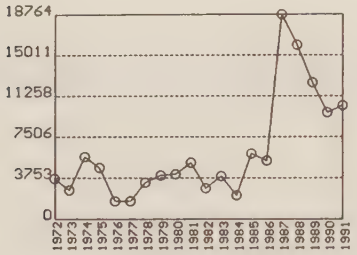
Table 8.1.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

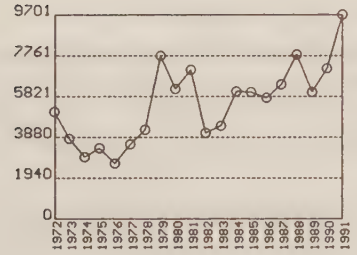
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-		CATCH (MT) -1972-	RANK AND PERCENT -1972-	
Marine fishes nei	1	2818	2	10.3%	3677	2	14.3%
Sardinellas nei	2	4090	1	15.0%	5097	1	19.9%
Silversides(=Sand smelts)	3	248	27	0.9%	189	25	0.7%
European pilchard(=Sardine)	4	830	10	3.0%	152	28	0.6%
Mullets nei	5	1685	4	6.2%	1390	5	5.4%
Bogue	6	622	13	2.3%	771	11	3.0%
Picarels	7	1032	6	3.8%	404	15	1.6%
Chub mackerel	8	577	14	2.1%	374	16	1.5%
Gurnards, searobins nei	9	217	30	0.8%	687	12	2.7%
Lizardfishes nei	10	351	21	1.3%	804	10	3.1%
Gilthead seabream	11	638	12	2.3%	900	8	3.5%
Striped mullet	12	965	7	3.5%	87	31	0.3%
Red porgy	13	389	19	1.4%	828	9	3.2%
Scorpionfishes, nei	14	21	60	0.1%	1	54	0.0%
Groupers nei	15	277	26	1.0%	569	13	2.2%
Meagre	16	202	31	0.7%	151	29	0.6%
Red mullet	17	396	18	1.5%	341	17	1.3%
Atlantic gobies	18	1176	5	4.3%	195	23	0.8%
Barracudas	19	2460	3	9.0%	302	18	1.2%
Surmullets(=Red mullets)	20	887	8	3.3%	1444	4	5.6%
Porgies, seabreams, nei	21	728	11	2.7%	288	19	1.1%
Sharks, rays, skates, etc	22	242	28	0.9%	419	14	1.6%
TOTALS		27303		100.0%	25675		100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



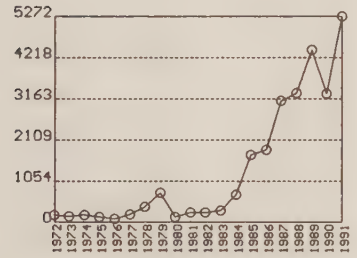
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 27.77 %
Rank..... 1 of 24 based on:1991
Percent to total..... 15.51 % , Cumulative: 15.51 %



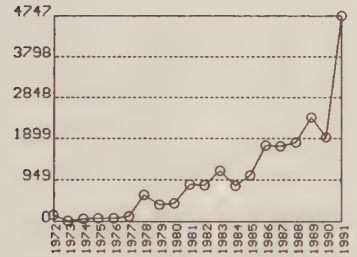
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sardinellas nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 13.18 %
Rank..... 2 of 24 based on:1991
Percent to total..... 14.48 % , Cumulative: 29.99 %



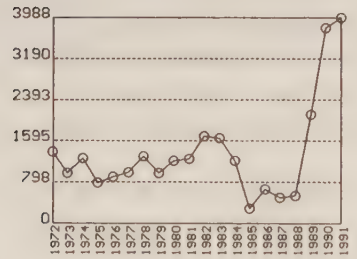
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Silversides(=Sand smelts)
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 55.64 %
Rank..... 3 of 24 based on:1991
Percent to total..... 7.87 % , Cumulative: 37.87 %



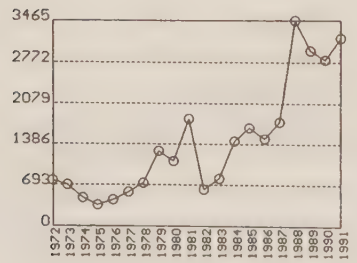
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 49.43 %
Rank..... 4 of 24 based on:1991
Percent to total..... 7.09 % , Cumulative: 44.95 %



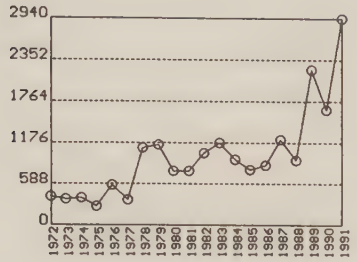
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 16.56 %
Rank..... 5 of 24 based on:1991
Percent to total..... 5.95 % , Cumulative: 50.91 %



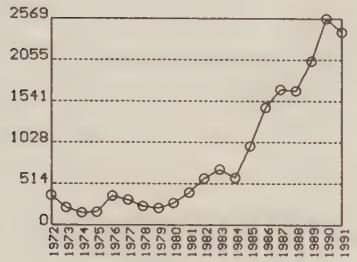
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 31.43 %
Rank..... 6 of 24 based on:1991
Percent to total..... 4.74 % , Cumulative: 55.65 %



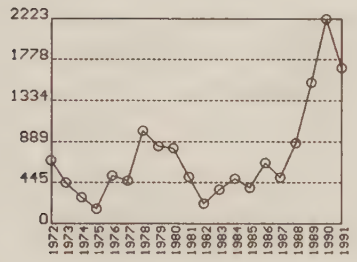
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 27.68 %
Rank..... 7 of 24 based on:1991
Percent to total..... 4.39 % , Cumulative: 60.04 %



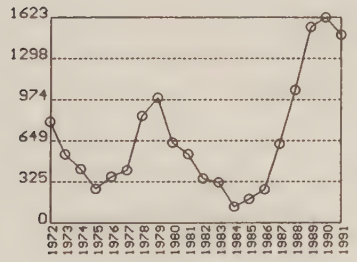
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Chub mackerel
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 43.88 %
Rank..... 8 of 24 based on:1991
Percent to total..... 3.58 % , Cumulative: 63.63 %



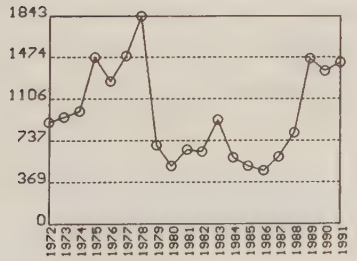
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gurnards, searobins nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 22.97 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.52 % , Cumulative: 66.14 %



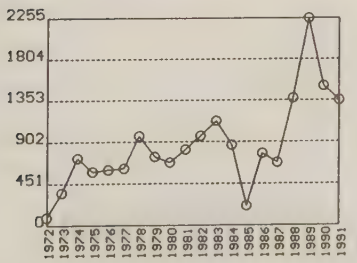
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Lizardfishes nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 17.66 %
Rank..... 10 of 24 based on:1991
Percent to total..... 2.22 % , Cumulative: 68.36 %



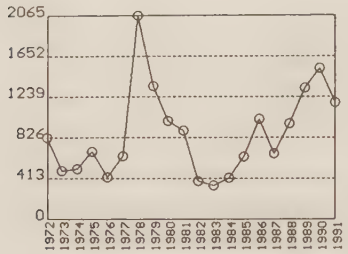
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Gilthead seabream
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... -2.35 %
Rank..... 11 of 24 based on:1991
Percent to total..... 2.14 % , Cumulative: 70.50 %



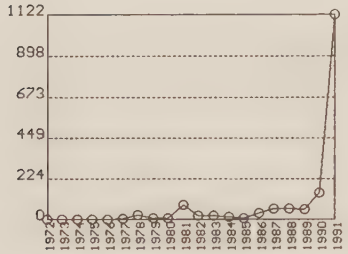
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped mullet
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 20.96 %
Rank..... 12 of 24 based on:1991
Percent to total..... 2.02 % , Cumulative: 72.52 %



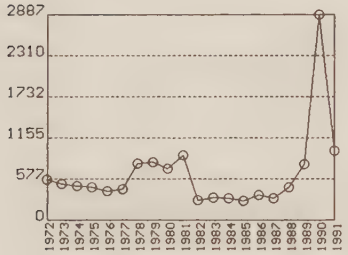
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red porgy
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 8.01 %
Rank..... 13 of 24 based on:1991
Percent to total..... 1.76 % , Cumulative: 74.29 %



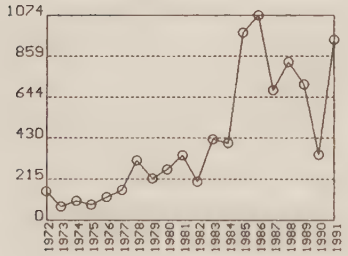
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Scorpionfishes, nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 74.59 %
Rank..... 14 of 24 based on:1991
Percent to total..... 1.68 % , Cumulative: 75.96 %



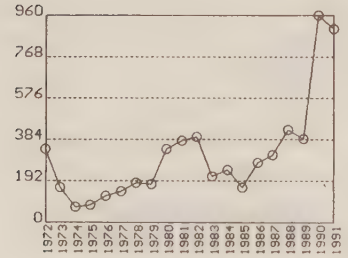
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Groupers nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 15.65 %
Rank..... 15 of 24 based on:1991
Percent to total..... 1.46 % , Cumulative: 77.42 %



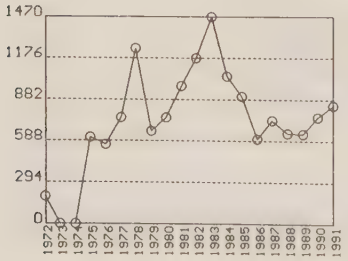
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Meagre
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 33.32 %
Rank..... 16 of 24 based on:1991
Percent to total..... 1.41 % , Cumulative: 78.83 %



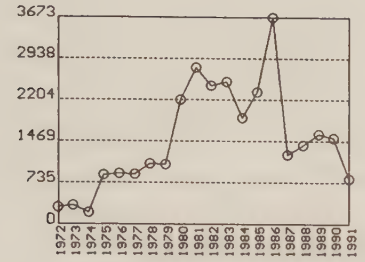
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red mullet
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 27.56 %
Rank..... 17 of 24 based on:1991
Percent to total..... 1.34 % , Cumulative: 80.17 %



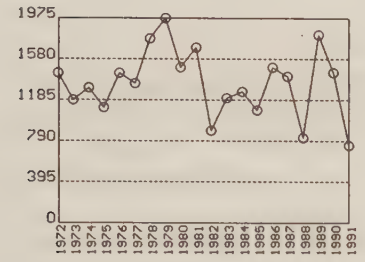
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic gobies
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 12.31 %
Rank..... 18 of 24 based on:1991
Percent to total..... 1.26 % , Cumulative: 81.43 %



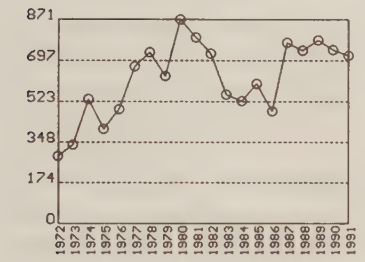
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Barracudas
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 15.84 %
Rank..... 19 of 24 based on:1991
Percent to total..... 1.21 % , Cumulative: 82.63 %



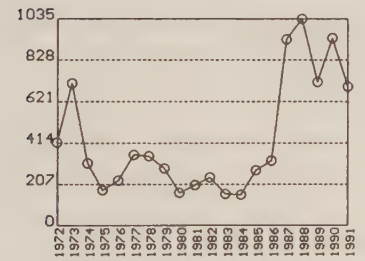
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 22 %
Trend index..... -2.45 %
Rank..... 20 of 24 based on:1991
Percent to total..... 1.11 % , Cumulative: 83.75 %



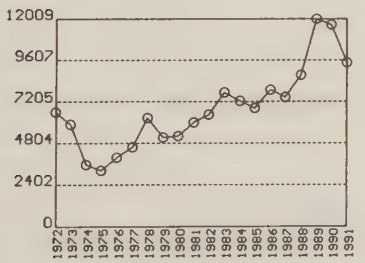
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Porgies, seabreams, nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 8.48 %
Rank..... 21 of 24 based on:1991
Percent to total..... 1.07 % , Cumulative: 84.82 %



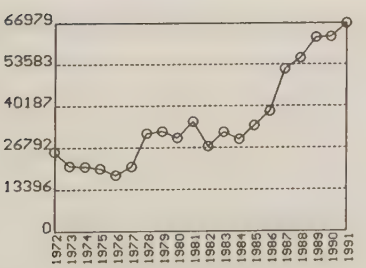
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sharks, rays, skates, etc
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 17.85 %
Rank..... 22 of 24 based on:1991
Percent to total..... 1.04 % , Cumulative: 85.86 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 15.43 %
Rank..... 23 of 24 based on:1991
Percent to total..... 14.14 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE - TOTAL
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 20.75 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

8.2 Crustaceans

Table 8.2.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	4507	83.9 %	Rising
Marine crabs nei	2	740	13.8 %	Rising
Marine crustaceans nei	3	92	1.7 %	Stable (-)
Deepwater rose shrimp	4	28	0.5 %	Sharp rise
Palinurid spiny lobsters nei	5	4	0.1 %	Rising
European lobster	6	2	0.0 %	Sharp rise
Mantis squillid	7	0	0.0 %	Sharp rise
TOTAL CRUSTACEANS		5373	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	1.7 %
from rising catches.....	98.3 %

Table 8.2.2

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Proportions of producers of crustaceans - 1991 ranking

Egypt:88.68%, Turkey:5.96%, Israel:3.61%, Syria:1.25%, Lebanon:0.47%, Cyprus:0.04%, Gaza Strip:0.00%.

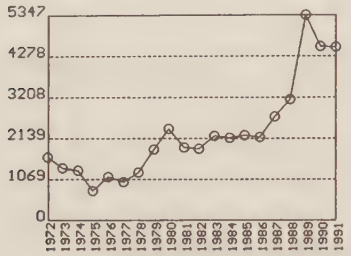
Table 8.2.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

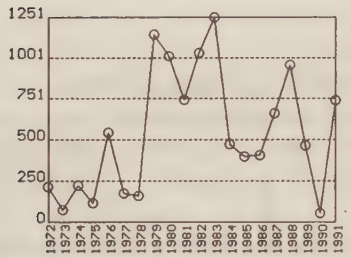
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	1870	1 63.5%	1650	1 83.9%
Marine crabs nei	2	1034	2 35.1%	214	2 10.9%
Marine crustaceans nei	3	28	3 1.0%	100	3 5.1%
Deepwater rose shrimp	4	0	7 0.0%	0	7 0.0%
Palinurid spiny lobsters nei	5	14	4 0.5%	2	4 0.1%
European lobster	6	1	5 0.0%	0	5 0.0%
Mantis squillid	7	0	6 0.0%	0	6 0.0%
TOTALS		2947	100.0%	1966	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



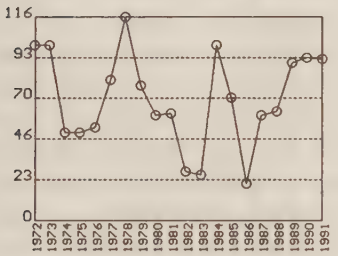
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 24.60 %
Rank..... 1 of 8 based on:1991
Percent to total..... 83.88 % , Cumulative: 83.88 %



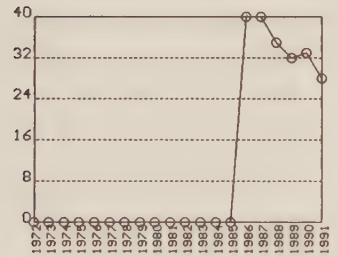
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crabs nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... 11.80 %
Rank..... 2 of 8 based on:1991
Percent to total..... 13.77 % , Cumulative: 97.65 %



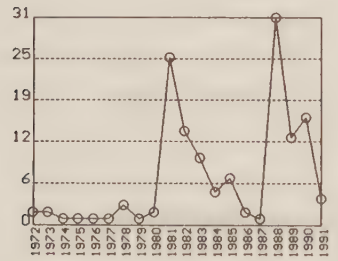
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... -1.07 %
Rank..... 3 of 8 based on:1991
Percent to total..... 1.71 % , Cumulative: 99.37 %



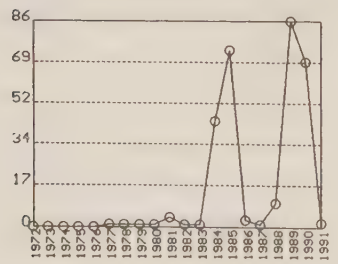
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Deepwater rose shrimp
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 64.74 %
Rank..... 4 of . 8 based on:1991
Percent to total..... 0.52 % , Cumulative: 99.89 %



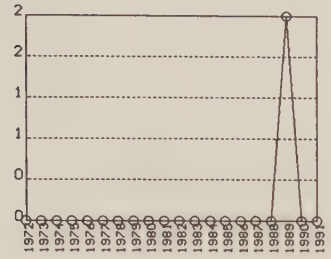
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 30.72 %
Rank..... 5 of 8 based on:1991
Percent to total..... 0.07 % , Cumulative: 99.96 %



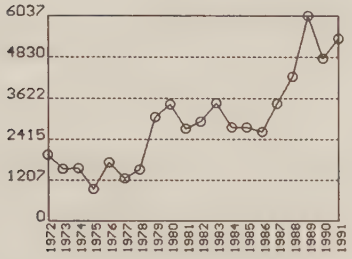
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 53.88 %
Rank..... 6 of 8 based on:1991
Percent to total..... 0.04 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mantis squillid
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 71.43 %
Rank..... 7 of 8 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 21.92 %
Rank..... 8 of 8 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

8.3 Molluscs

Table 8.3.1

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Cuttlefishes, bobtail squids	1	765	54.6 %	Rising
Octopuses	2	170	12.1 %	Rising
Common cuttlefish	3	165	11.8 %	Rising
European flat oyster	4	101	7.2 %	Sharp rise
Cephalopods nei	5	76	5.4 %	Sharp rise
Common octopus	6	61	4.4 %	Sharp rise
Common squids	7	38	2.7 %	Sharp rise
Marine molluscs nei	8	25	1.8 %	Sharp rise
Striped venus	9	0	0.0 %	Sharp rise
Mediterranean mussel	10	0	0.0 %	Rising
TOTAL MOLLUSCS		1401	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 8.3.2

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Proportions of producers of molluscs - 1991 ranking

Egypt:47.04%, Turkey:26.05%, Cyprus:19.70%, Israel:5.42%, Lebanon:1.78%.

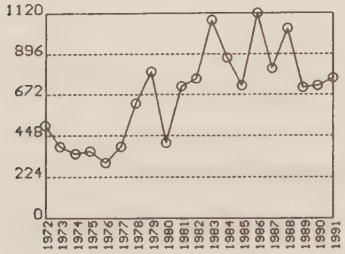
Table 8.3.3

MEDITERRANEAN AND BLACK SEA - Eastern Sub-Area

Division 37.3.2: Levant
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

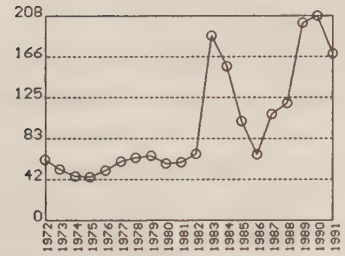
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Cuttlefishes, bobtail squids	1	761	1 79.4%	504	1 58.2%
Octopuses	2	68	2 7.1%	62	3 7.2%
Common cuttlefish	3	55	3 5.7%	300	2 34.6%
European flat oyster	4	0	8 0.0%	0	7 0.0%
Cephalopods nei	5	0	7 0.0%	0	6 0.0%
Common octopus	6	25	5 2.6%	0	5 0.0%
Common squids	7	28	4 2.9%	0	4 0.0%
Marine molluscs nei	8	21	6 2.2%	0	10 0.0%
Striped venus	9	0	9 0.0%	0	8 0.0%
Mediterranean mussel	10	0	10 0.0%	0	9 0.0%
TOTALS		958	100.0%	866	100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



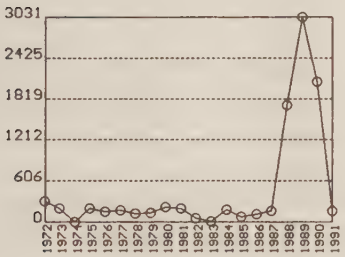
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cuttlefishes, bobtail squids
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 14.18 %
Rank..... 1 of 11 based on:1991
Percent to total..... 54.60 % , Cumulative: 54.60 %



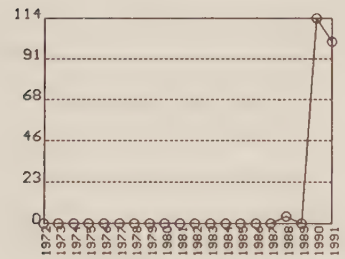
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Octopuses
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 24.01 %
Rank..... 2 of 11 based on:1991
Percent to total..... 12.13 % , Cumulative: 66.74 %



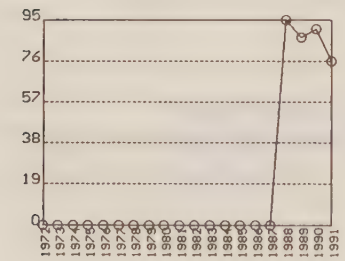
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 47.80 %
Rank..... 3 of 11 based on:1991
Percent to total..... 11.78 % , Cumulative: 78.52 %



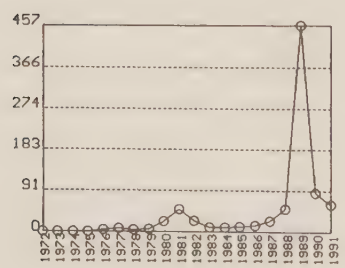
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flat oyster
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 85.00 %
Rank..... 4 of 11 based on:1991
Percent to total..... 7.21 % , Cumulative: 85.72 %



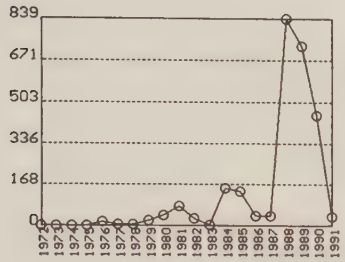
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Cephalopods nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 75.47 %
Rank..... 5 of 11 based on:1991
Percent to total..... 5.42 % , Cumulative: 91.15 %



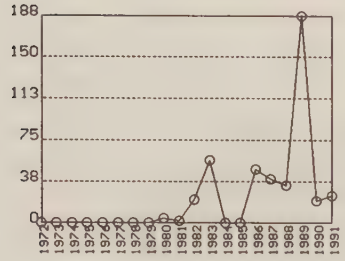
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common octopus
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 58.70 %
Rank..... 6 of 11 based on:1991
Percent to total..... 4.35 % , Cumulative: 95.50 %



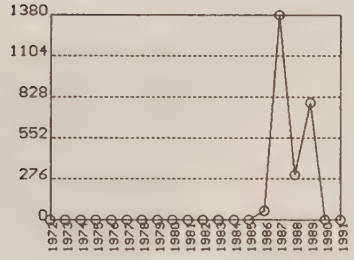
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 58.31 %
Rank..... 7 of 11 based on:1991
Percent to total..... 2.71 % , Cumulative: 98.22 %



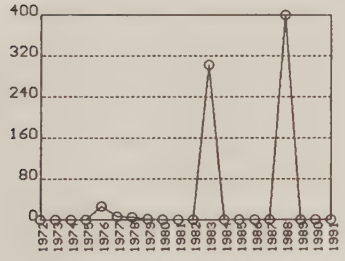
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 55.58 %
Rank..... 8 of 11 based on:1991
Percent to total..... 1.78 % , Cumulative:100.00 %



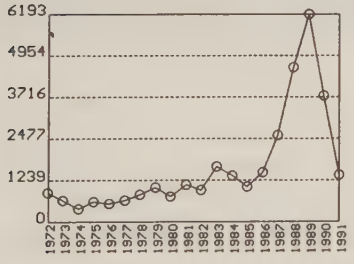
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped venus
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 59.21 %
Rank..... 9 of 11 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 36.71 %
Rank..... 10 of 11 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.3.2 - LEVANT
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 34.87 %
Rank..... 11 of 11 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

9. MEDITERRANEAN AND BLACK SEA

37.4: Black Sea Sub-Area

Division 37.4.1 - Sea of Marmara

PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Turkey 100%.

9.1 Diadromous fish and marine fish.

Table 9.1.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European anchovy	1	9709	26.7 %	Rising
Mediterranean horse mackerel	2	4072	11.2 %	Rising
Whiting	3	3343	9.2 %	Sharp rise
European pilchard(=Sardine)	4	3263	9.0 %	Rising
Blue whiting(=Poutassou)	5	3186	8.8 %	Sharp rise
Bluefish	6	2509	6.9 %	Rising
Atlantic horse mackerel	7	2417	6.7 %	Rising
Mullets nei	8	1510	4.2 %	Rising
Chub mackerel	9	1476	4.1 %	Rising
Red mullet	10	1161	3.2 %	Rising
Gurnards, searobins nei	11	411	1.1 %	Sharp rise
Flatfishes nei	12	390	1.1 %	Rising
Garfish	13	346	1.0 %	Sharp rise
Common dentex	14	220	0.6 %	Sharp rise
Striped mullet	15	217	0.6 %	Rising
Turbot	16	217	0.6 %	Rising
Atlantic mackerel	17	200	0.6 %	Rising
Picarels	18	193	0.5 %	Rising
Brown meagre	19	184	0.5 %	Sharp rise
White seabream	20	182	0.5 %	Rising
Silversides(=Sand smelts)	21	181	0.5 %	Rising
Shi drum(=Corb)	22	179	0.5 %	Sharp rise
OTHER DIADROMOUS AND MARINE	23	807	2.2 %	Rising
TOTAL DIADROMOUS AND MARINE		36373	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 9.1.2

MEDITERRANEAN AND BLACK SEA - 37.4.1: Sea of Marmara
Proportions of producers of diadromous and marine fish - 1991 ranking

Turkey 100%.

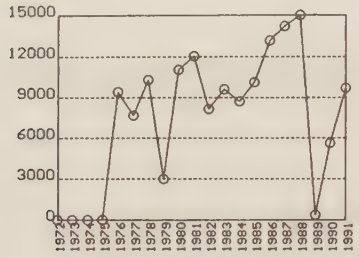
Table 9.1.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

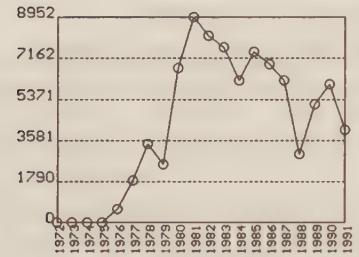
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European anchovy	1	8163	2 22.3%	0	28 0.0%
Mediterranean horse mackerel	2	8139	3 22.2%	0	19 0.0%
Whiting	3	225	11 0.6%	13	11 0.4%
European pilchard(=Sardine)	4	2258	5 6.2%	2560	1 68.2%
Blue whiting(=Poutassou)	5	24	22 0.1%	0	36 0.0%
Bluefish	6	8369	1 22.9%	0	38 0.0%
Atlantic horse mackerel	7	738	7 2.0%	0	16 0.0%
Mullets nei	8	567	8 1.6%	0	34 0.0%
Chub mackerel	9	5548	4 15.2%	34	8 0.9%
Red mullet	10	889	6 2.4%	0	25 0.0%
Gurnards, searobins nei	11	90	15 0.3%	15	10 0.4%
Flatfishes nei	12	119	14 0.3%	87	5 2.3%
Garfish	13	21	25 0.1%	0	48 0.0%
Common dentex	14	1	41 0.0%	0	40 0.0%
Striped mullet	15	83	16 0.2%	0	15 0.0%
Turbot	16	182	12 0.5%	0	20 0.0%
Atlantic mackerel	17	52	17 0.1%	177	3 4.7%
Picarels	18	428	9 1.2%	0	24 0.0%
Brown meagre	19	6	34 0.0%	0	33 0.0%
White seabream	20	33	20 0.1%	107	4 2.9%
Silversides(=Sand smelts)	21	42	19 0.1%	70	6 1.9%
Shi drum(=Corb)	22	21	24 0.1%	0	23 0.0%
TOTALS		36619	100.0%	3755	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



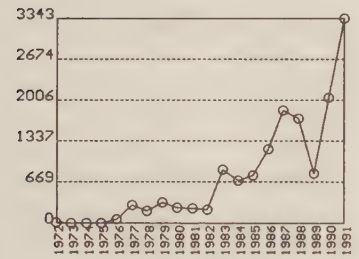
Year range.....1972-1991
Country.....TURKEY
Species.....European anchovy
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... 19.33 %
Rank..... 1 of 24 based on:1991
Percent to total..... 26.69 % , Cumulative: 26.69 %



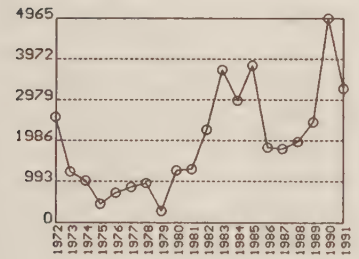
Year range.....1972-1991
Country.....TURKEY
Species.....Mediterranean horse mackerel
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 25.35 %
Rank..... 2 of 24 based on:1991
Percent to total..... 11.20 % , Cumulative: 37.89 %



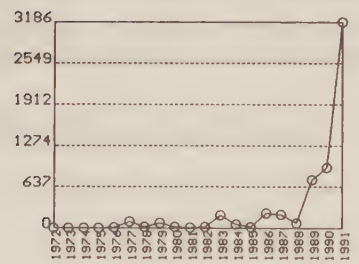
Year range.....1972-1991
Country.....TURKEY
Species.....Whiting
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 53.50 %
Rank..... 3 of 24 based on:1991
Percent to total..... 9.19 % , Cumulative: 47.08 %



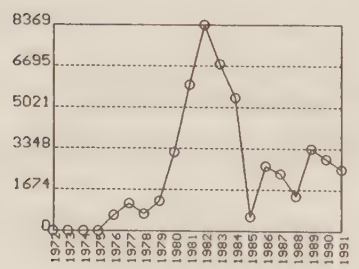
Year range.....1972-1991
Country.....TURKEY
Species.....European pilchard(=Sardine)
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 21.68 %
Rank..... 4 of 24 based on:1991
Percent to total..... 8.97 % , Cumulative: 56.05 %



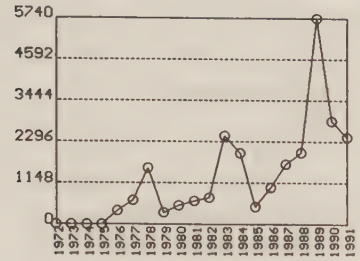
Year range.....1972-1991
Country.....TURKEY
Species.....Blue whiting(=Poutassou)
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 74.01 %
Rank..... 5 of 24 based on:1991
Percent to total..... 8.76 % , Cumulative: 64.81 %



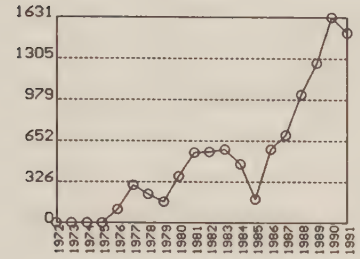
Year range.....1972-1991
Country.....TURKEY
Species.....Bluefish
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 22.47 %
Rank..... 6 of 24 based on:1991
Percent to total..... 6.90 % , Cumulative: 71.71 %



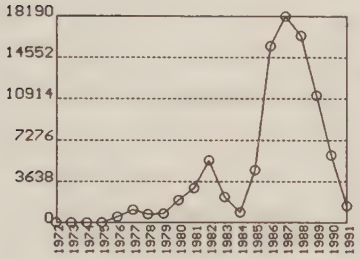
Year range.....1972-1991
Country.....TURKEY
Species.....Atlantic horse mackerel
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 43.09 %
Rank..... 7 of 24 based on:1991
Percent to total..... 6.65 % , Cumulative: 78.35 %



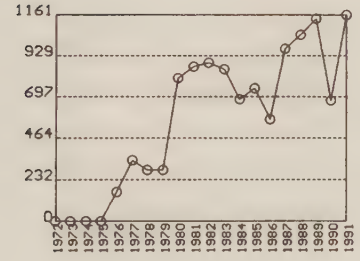
Year range.....1972-1991
Country.....TURKEY
Species.....Mullets nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 46.21 %
Rank..... 8 of 24 based on:1991
Percent to total..... 4.15 % , Cumulative: 82.50 %



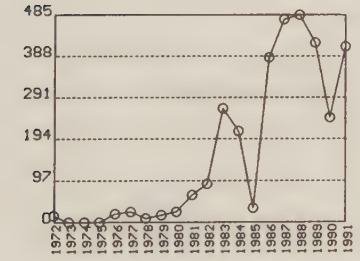
Year range.....1972-1991
Country.....TURKEY
Species.....Chub mackerel
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 45.51 %
Rank..... 9 of 24 based on:1991
Percent to total..... 4.06 % , Cumulative: 86.56 %



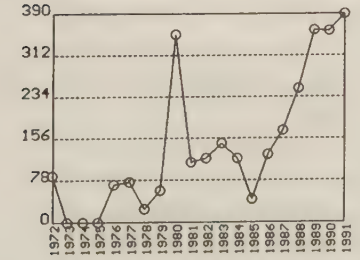
Year range.....1972-1991
Country.....TURKEY
Species.....Red mullet
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 33.38 %
Rank..... 10 of 24 based on:1991
Percent to total..... 3.19 % , Cumulative: 89.75 %



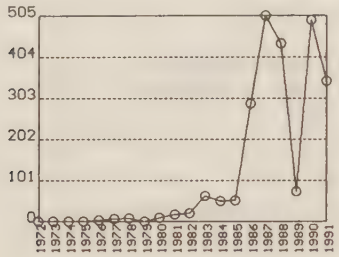
Year range.....1972-1991
Country.....TURKEY
Species.....Gurnards, searobins nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 51.29 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.13 % , Cumulative: 90.88 %



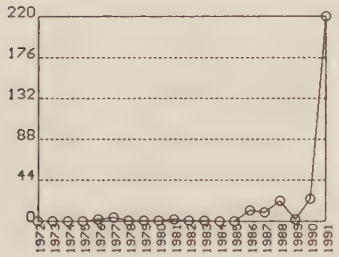
Year range.....1972-1991
Country.....TURKEY
Species.....Flatfishes nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 36.46 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.07 % , Cumulative: 91.96 %



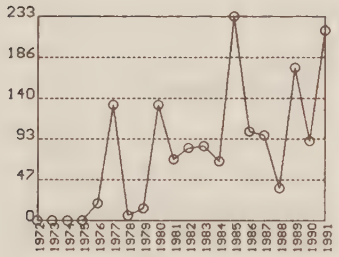
Year range.....1972-1991
Country.....TURKEY
Species.....Garfish
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 61.11 %
Rank..... 13 of 24 based on:1991
Percent to total..... 0.95 % , Cumulative: 92.91 %



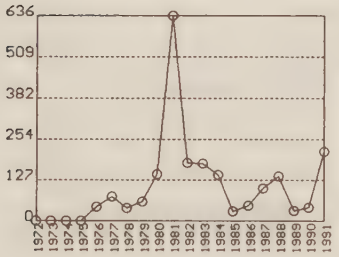
Year range.....1972-1991
Country.....TURKEY
Species.....Common dentex
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 79.38 %
Rank..... 14 of 24 based on:1991
Percent to total..... 0.60 % , Cumulative: 93.51 %



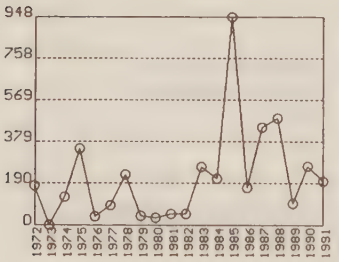
Year range.....1972-1991
Country.....TURKEY
Species.....Striped mullet
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 21 %
Trend index..... 33.72 %
Rank..... 15 of 24 based on:1991
Percent to total..... 0.60 % , Cumulative: 94.11 %



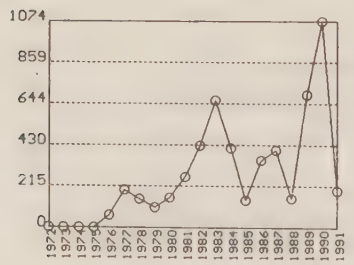
Year range.....1972-1991
Country.....TURKEY
Species.....Turbot
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 16.97 %
Rank..... 16 of 24 based on:1991
Percent to total..... 0.60 % , Cumulative: 94.70 %



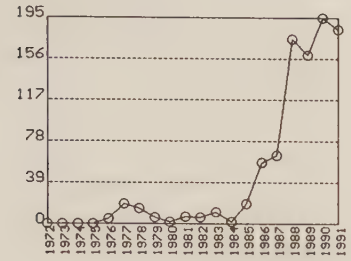
Year range.....1972-1991
Country.....TURKEY
Species.....Atlantic mackerel
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 19 %
Trend index..... 20.15 %
Rank..... 17 of 24 based on:1991
Percent to total..... 0.55 % , Cumulative: 95.25 %



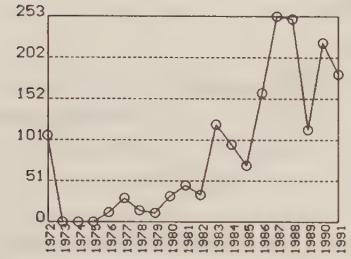
Year range.....1972-1991
Country.....TURKEY
Species.....Picarels
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 37.28 %
Rank..... 18 of 24 based on:1991
Percent to total..... 0.53 % , Cumulative: 95.79 %



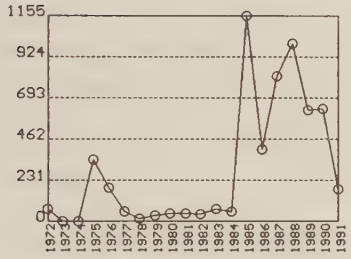
Year range.....1972-1991
Country.....TURKEY
Species.....Brown meagre
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 64.23 %
Rank..... 19 of 24 based on:1991
Percent to total..... 0.51 % , Cumulative: 96.29 %



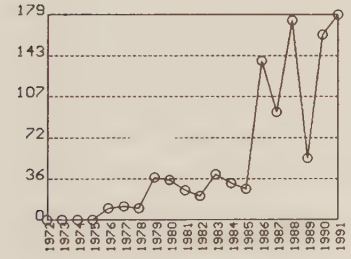
Year range.....1972-1991
Country.....TURKEY
Species.....White seabream
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 40.95 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.50 % , Cumulative: 96.79 %



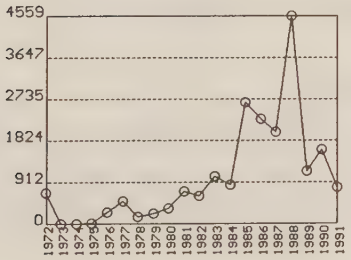
Year range.....1972-1991
Country.....TURKEY
Species.....Silversides(=Sand smelts)
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 15 %
Trend index..... 40.38 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.50 % , Cumulative: 97.29 %



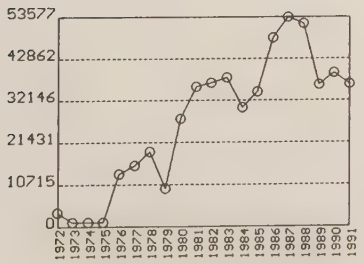
Year range.....1972-1991
Country.....TURKEY
Species.....Shi drum(=Corb)
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 15 %
Trend index..... 51.59 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.49 % , Cumulative: 97.78 %



Year range.....1972-1991
Country.....TURKEY
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 38.14 %
Rank..... 23 of 24 based on:1991
Percent to total..... 2.22 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....TURKEY
Species.....TOTAL DIADROMOUS AND MARINE
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 30.63 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

9.2 Crustaceans

Table 9.2.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	1203	98.6 %	Rising
Marine crabs nei	2	15	1.2 %	Rising
Palinurid spiny lobsters nei	3	1	0.1 %	Rising
European lobster	4	1	0.1 %	Sharp rise
TOTAL CRUSTACEANS		1220	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 9.2.2

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Proportions of producers of crustaceans - 1991 ranking

Turkey 100%.

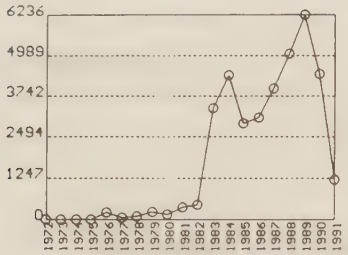
Table 9.2.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

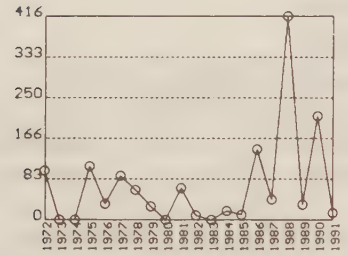
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	453	1 97.8%	0	2 0.0%
Marine crabs nei	2	9	2 1.9%	100	1 100.0%
Palinurid spiny lobsters nei	3	1	3 0.2%	0	3 0.0%
European lobster	4	0	4 0.0%	0	4 0.0%
TOTALS		463	100.0%	100	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



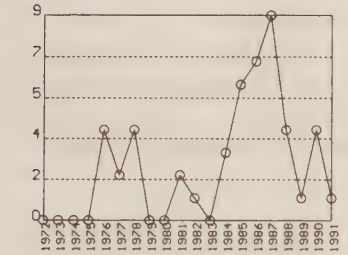
Year range.....1972-1991
Country.....TURKEY
Species.....Natantian decapods nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 49.43 %
Rank..... 1 of 5 based on:1991
Percent to total..... 98.61 % , Cumulative: 98.61 %



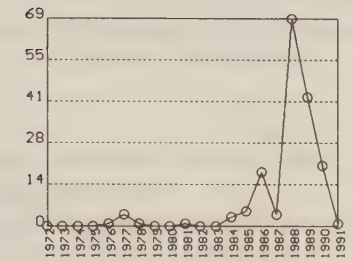
Year range.....1972-1991
Country.....TURKEY
Species.....Marine crabs nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 22 %
Trend index..... 22.58 %
Rank..... 2 of 5 based on:1991
Percent to total..... 1.23 % , Cumulative: 99.84 %



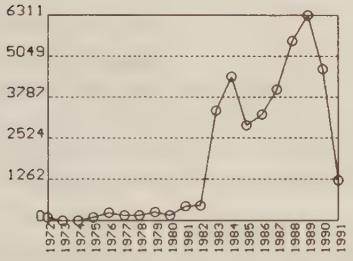
Year range.....1972-1991
Country.....TURKEY
Species.....Palinurid spiny lobsters nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 27.98 %
Rank..... 3 of 5 based on:1991
Percent to total..... 0.08 % , Cumulative: 99.92 %



Year range.....1972-1991
Country.....TURKEY
Species.....European lobster
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 58.88 %
Rank..... 4 of 5 based on:1991
Percent to total..... 0.08 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....TURKEY
Species.....TOTAL CRUSTACEANS
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 48.46 %
Rank..... 5 of 5 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

9.3 Molluscs

Table 9.3.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Striped venus	1	12427	68.8 %	Sharp rise
Mediterranean mussel	2	3739	20.7 %	Sharp rise
European flat oyster	3	1855	10.3 %	Sharp rise
Common octopus	4	23	0.1 %	Sharp rise
Common cuttlefish	5	19	0.1 %	Sharp rise
Common squids	6	6	0.0 %	Sharp rise
Great scallop	7	0	0.0 %	Declining
Marine molluscs nei	8	0	0.0 %	Sharp rise
TOTAL MOLLUSCS		18069	100.0 %	Sharp rise

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 9.3.2

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Proportions of producers of molluscs - 1991 ranking

Turkey 100%.

Table 9.3.3

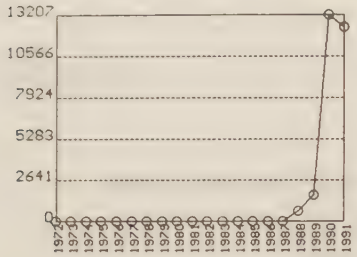
MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.1: Sea of Marmara
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK	AND PERCENT	CATCH (MT) -1972-	RANK	AND PERCENT
Striped venus	1	0	4	0.0%	0	4	0.0%
Mediterranean mussel	2	30	1	100.0%	0	1	100.0%
European flat oyster	3	0	2	0.0%	0	2	0.0%
Common octopus	4	0	3	0.0%	0	3	0.0%
Common cuttlefish	5	0	8	0.0%	0	8	0.0%
Common squids	6	0	5	0.0%	0	5	0.0%
Great scallop	7	0	6	0.0%	0	6	0.0%
Marine molluscs nei	8	0	7	0.0%	0	7	0.0%
TOTALS		30		100.0%	0		100.0%

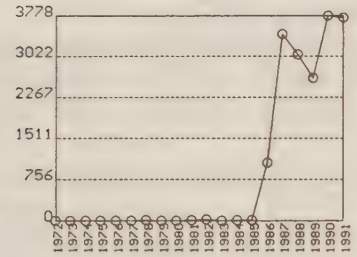
Note: Comparison of production in the periods 1972 and 1982 is not meaningful in this specific case, as most species showed zero production in the years before 1985.

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



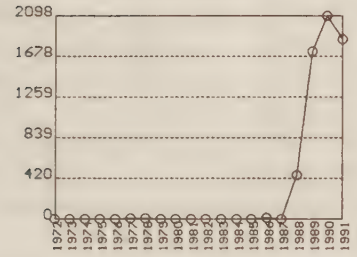
Year range.....1972-1991
Country.....TURKEY
Species.....Striped venus
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 84.15 %
Rank..... 1 of 9 based on:1991
Percent to total..... 68.78 % , Cumulative: 68.78 %



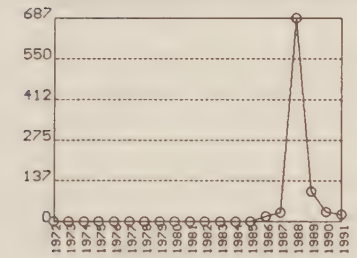
Year range.....1972-1991
Country.....TURKEY
Species.....Mediterranean mussel
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 70.01 %
Rank..... 2 of 9 based on:1991
Percent to total..... 20.69 % , Cumulative: 89.47 %



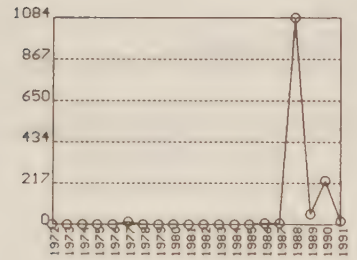
Year range.....1972-1991
Country.....TURKEY
Species.....European flat oyster
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 1 %
Trend index..... 79.33 %
Rank..... 3 of 9 based on:1991
Percent to total..... 10.27 % , Cumulative: 99.73 %



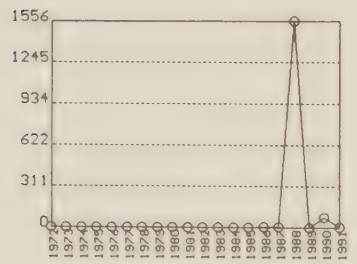
Year range.....1972-1991
Country.....TURKEY
Species.....Common octopus
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 63.49 %
Rank..... 4 of 9 based on:1991
Percent to total..... 0.13 % , Cumulative: 99.86 %



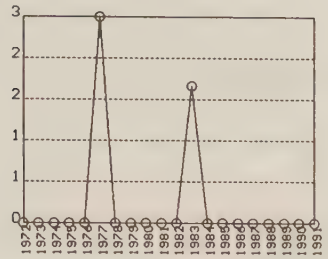
Year range.....1972-1991
Country.....TURKEY
Species.....Common cuttlefish
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 64.56 %
Rank..... 5 of 9 based on:1991
Percent to total..... 0.11 % , Cumulative: 99.97 %



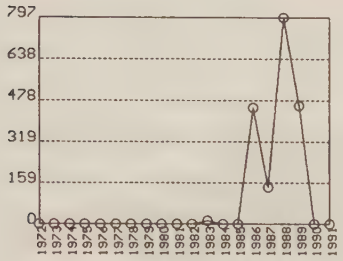
Year range.....1972-1991
Country.....TURKEY
Species.....Common squids
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 62.70 %
Rank..... 6 of 9 based on:1991
Percent to total..... 0.03 % , Cumulative:100.00 %



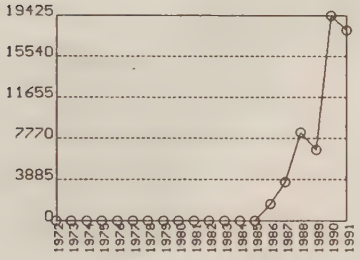
Year range.....1972-1991
Country.....TURKEY
Species.....Great scallop
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index.....-20.00 %
Rank..... 7 of 9 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....TURKEY
Species.....Marine molluscs nei
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 58.55 %
Rank..... 8 of 9 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....TURKEY
Species.....TOTAL MOLLUSCS
Area.....37.4.1 - SEA OF MARMARA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 77.03 %
Rank..... 9 of 9 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

10. MEDITERRANEAN AND BLACK SEA

37.4: Black Sea Sub-Area

Division 37.4.2 - Black Sea

PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Turkey:85.25%, Former USSR:12.70%, Bulgaria:1.44%, Romania:0.61%.

10.1 Diadromous fish and marine fish.

Table 10.1.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Production of diadromous and marine fish (top 22 species), ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
European anchovy	1	85076	44.3 %	Stable (+)
Mediterranean horse mackerel	2	19993	10.4 %	Rising
Whiting	3	19039	9.9 %	Rising
European sprat	4	18417	9.6 %	Rising
Bluefish	5	9026	4.7 %	Rising
Chub mackerel	6	7430	3.9 %	Rising
European pilchard(=Sardine)	7	6678	3.5 %	Sharp rise
Atlantic horse mackerel	8	5898	3.1 %	Rising
Mullets nei	9	4036	2.1 %	Rising
Striped mullet	10	2712	1.4 %	Rising
Shads nei	11	2456	1.3 %	Rising
Smoothhounds	12	2017	1.1 %	Rising
Bogue	13	1625	0.9 %	Sharp rise
Marine fishes nei	14	1294	0.7 %	Declining
Turbot	15	915	0.5 %	Declining
Red mullet	16	898	0.5 %	Rising
Sharks, rays, skates, etc	17	860	0.5 %	Rising
Atlantic mackerel	18	780	0.4 %	Rising
Skates and rays, nei	19	778	0.4 %	Rising
Garfish	20	359	0.2 %	Declining
Picarels	21	339	0.2 %	Stable (+)
Surmullets(=Red mullets)	22	280	0.2 %	Rising
OTHER DIADROMOUS AND MARINE	23	1038	0.5 %	Declining
DIADROMOUS AND MARINE - TOTAL		191944	100.0 %	Rising

Proportion coming from declining catches.....	1.9 %
from stable catches.....	44.5 %
from rising catches.....	53.6 %

Note: Trends indicated as "rising" refer to the entire period 1972-1991, thus not reflecting the significant decline in production over the last years as shown in the following line plots.

Table 10.1.2

MEDITERRANEAN AND BLACK SEA - 37.4.2: Black Sea
Proportions of producers of diadromous and marine fish - 1991 ranking

Turkey:85.56%, Former USSR:12.31%, Bulgaria:1.50%, Romania:0.63%.

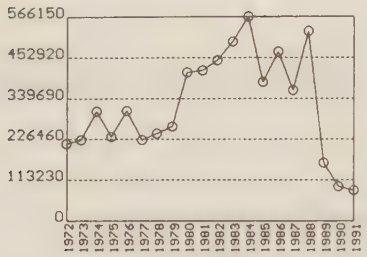
Table 10.1.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Production of diadromous and marine fish (top 22 species)
Comparison of ranking order and proportions in 1972, 1982 and 1991

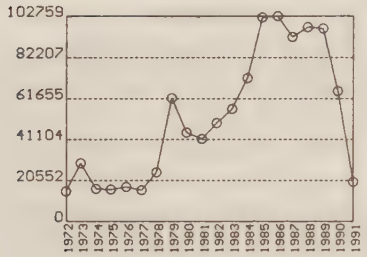
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
European anchovy	1	446183	1 68.6%	214356	1 75.4%
Mediterranean horse mackerel	2	49593	3 7.6%	15234	3 5.4%
Whiting	3	6581	7 1.0%	5416	5 1.9%
European sprat	4	75876	2 11.7%	6162	4 2.2%
Bluefish	5	23308	4 3.6%	1668	10 0.6%
Chub mackerel	6	2687	12 0.4%	100	25 0.0%
European pilchard(=Sardine)	7	0	50 0.0%	0	49 0.0%
Atlantic horse mackerel	8	9436	5 1.5%	0	58 0.0%
Mullets nei	9	2826	11 0.4%	3104	6 1.1%
Striped mullet	10	2436	13 0.4%	1400	11 0.5%
Shads nei	11	529	21 0.1%	225	20 0.1%
Smoothhounds	12	6750	6 1.0%	0	56 0.0%
Bogue	13	0	56 0.0%	0	55 0.0%
Marine fishes nei	14	4728	8 0.7%	2883	7 1.0%
Turbot	15	4552	9 0.7%	2639	8 0.9%
Red mullet	16	793	20 0.1%	1260	12 0.4%
Sharks, rays, skates, etc	17	1715	15 0.3%	0	39 0.0%
Atlantic mackerel	18	9	38 0.0%	0	37 0.0%
Skates and rays, nei	19	1554	16 0.2%	784	16 0.3%
Garfish	20	1473	17 0.2%	2001	9 0.7%
Picarels	21	1164	19 0.2%	889	14 0.3%
Surmullets(=Red mullets)	22	400	22 0.1%	204	22 0.1%
TOTALS		650701	100.0%	284333	100.0%

Line plots for the top 22 species of diadromous and marine fish and for the entire period 1972 - 1991 are given below.



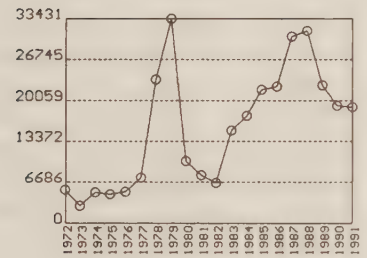
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European anchovy
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 1.94 %
Rank..... 1 of 24 based on:1991
Percent to total..... 44.32 % , Cumulative: 44.32 %



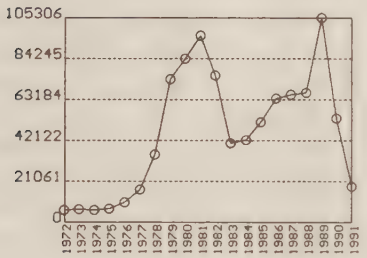
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean horse mackerel
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 23.89 %
Rank..... 2 of 24 based on:1991
Percent to total..... 10.42 % , Cumulative: 54.74 %



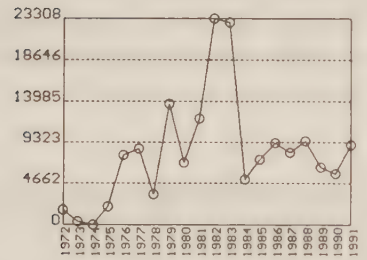
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Whiting
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 22.70 %
Rank..... 3 of 24 based on:1991
Percent to total..... 9.92 % , Cumulative: 64.66 %



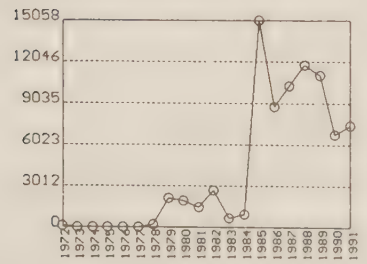
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European sprat
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 21.26 %
Rank..... 4 of 24 based on:1991
Percent to total..... 9.59 % , Cumulative: 74.25 %



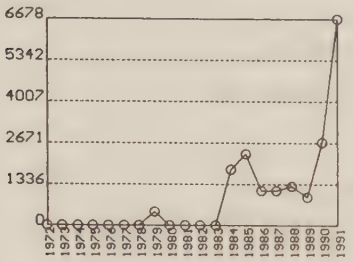
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bluefish
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 13.89 %
Rank..... 5 of 24 based on:1991
Percent to total..... 4.70 % , Cumulative: 78.96 %



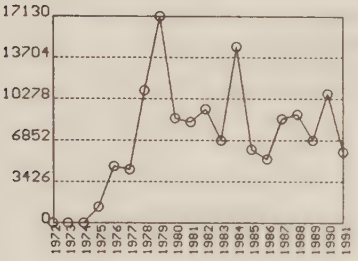
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Chub mackerel
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 50.37 %
Rank..... 6 of 24 based on:1991
Percent to total..... 3.87 % , Cumulative: 82.83 %



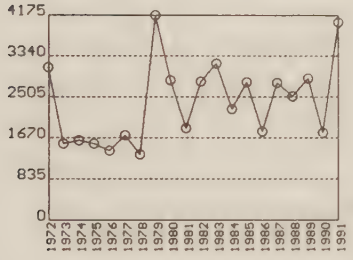
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European pilchard(=Sardine)
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 64.32 %
Rank..... 7 of 24 based on:1991
Percent to total..... 3.48 % , Cumulative: 86.31 %



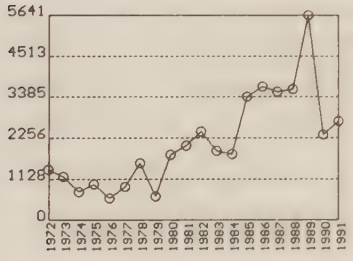
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic horse mackerel
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 16.99 %
Rank..... 8 of 24 based on:1991
Percent to total..... 3.07 % , Cumulative: 89.38 %



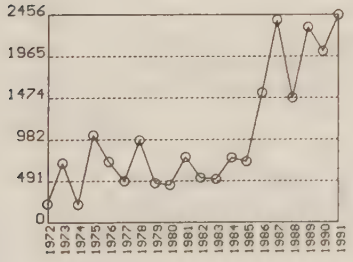
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mullets nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 25 %
Trend index..... 7.08 %
Rank..... 9 of 24 based on:1991
Percent to total..... 2.10 % , Cumulative: 91.48 %



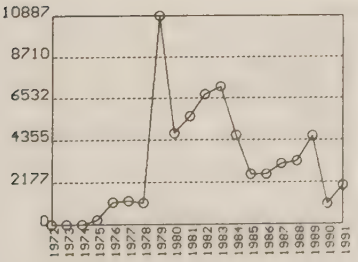
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Striped mullet
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 25.17 %
Rank..... 10 of 24 based on:1991
Percent to total..... 1.41 % , Cumulative: 92.89 %



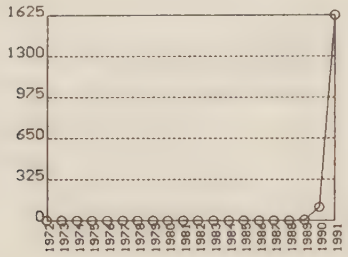
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Shads nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 16 %
Trend index..... 29.64 %
Rank..... 11 of 24 based on:1991
Percent to total..... 1.28 % , Cumulative: 94.17 %



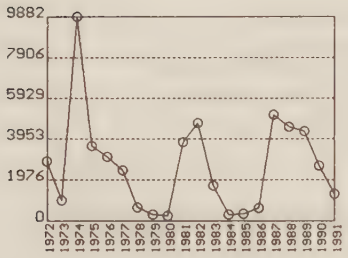
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Smoothhounds
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 14.05 %
Rank..... 12 of 24 based on:1991
Percent to total..... 1.05 % , Cumulative: 95.22 %



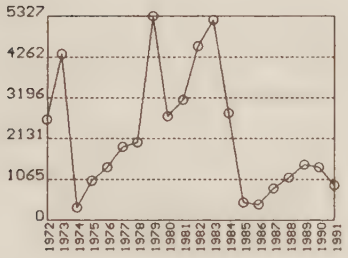
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bogue
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation.....
Trend index..... 89.84 %
Rank..... 13 of 24 based on:1991
Percent to total..... 0.85 % , Cumulative: 96.07 %



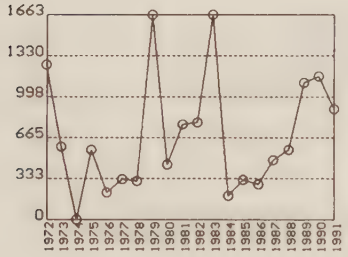
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine fishes nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... -5.70 %
Rank..... 14 of 24 based on:1991
Percent to total..... 0.67 % , Cumulative: 96.75 %



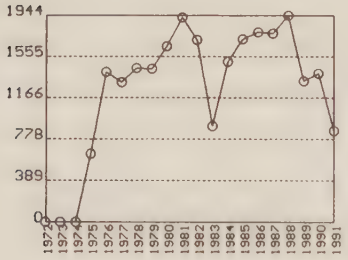
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Turbot
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index.....-10.75 %
Rank..... 15 of 24 based on:1991
Percent to total..... 0.48 % , Cumulative: 97.22 %



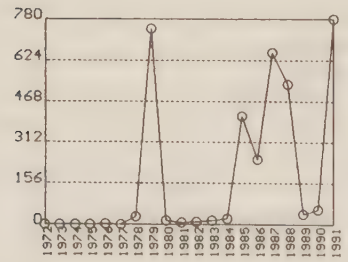
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Red mullet
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 21 %
Trend index..... 6.44 %
Rank..... 16 of 24 based on:1991
Percent to total..... 0.47 % , Cumulative: 97.69 %



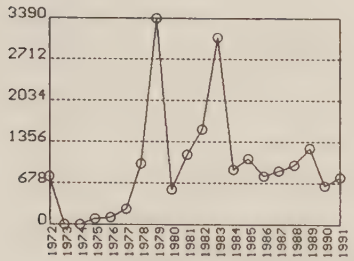
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Sharks, rays, skates, etc
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 16.33 %
Rank..... 17 of 24 based on:1991
Percent to total..... 0.45 % , Cumulative: 98.14 %



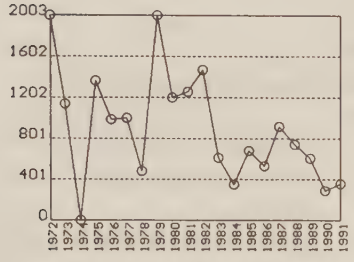
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic mackerel
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... 42.38 %
Rank..... 18 of 24 based on:1991
Percent to total..... 0.41 % , Cumulative: 98.54 %



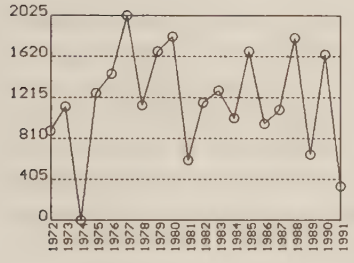
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Skates and rays, nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 12.39 %
Rank..... 19 of 24 based on:1991
Percent to total..... 0.41 % , Cumulative: 98.95 %



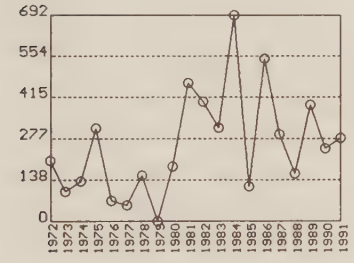
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Garfish
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 19 %
Trend index.....-15.34 %
Rank..... 20 of 24 based on:1991
Percent to total..... 0.19 % , Cumulative: 99.14 %



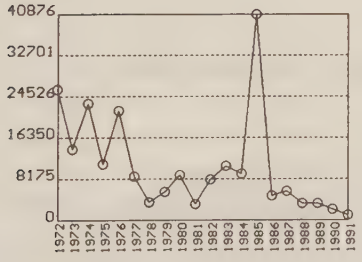
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Picarels
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 27 %
Trend index..... 0.20 %
Rank..... 21 of 24 based on:1991
Percent to total..... 0.18 % , Cumulative: 99.31 %



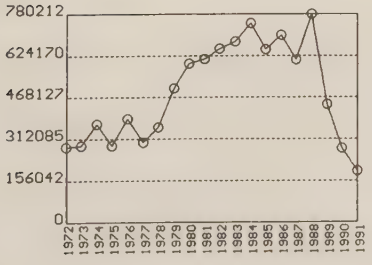
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Surmullets(=Red mullets)
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 23 %
Trend index..... 15.03 %
Rank..... 22 of 24 based on:1991
Percent to total..... 0.15 % , Cumulative: 99.46 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER DIADROMOUS AND MARINE
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 18 %
Trend index.....-21.94 %
Rank..... 23 of 24 based on:1991
Percent to total..... 0.53 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....DIADROMOUS AND MARINE - TOTAL
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 7.44 %
Rank..... 24 of 24 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

10.2 Crustaceans

Table 10.2.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Total production of crustaceans ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Natantian decapods nei	1	61	78.2 %	Rising
Marine crabs nei	2	17	21.8 %	Rising
Common shrimp	3	0	0.0 %	Declining
Palinurid spiny lobsters nei	4	0	0.0 %	Rising
European lobster	5	0	0.0 %	Stable (+)
Marine crustaceans nei	6	0	0.0 %	Sharp decl
TOTAL CRUSTACEANS		78	100.0 %	Stable (+)

Proportion coming from declining catches.....	0.0 %
from stable catches.....	0.0 %
from rising catches.....	100.0 %

Table 10.2.2

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Proportions of producers of crustaceans - 1991 ranking

Turkey 100%.

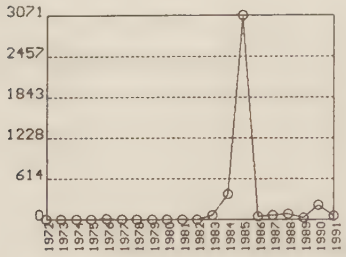
Table 10.2.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Total production of crustaceans
Comparison of ranking order and proportions in 1972, 1982 and 1991

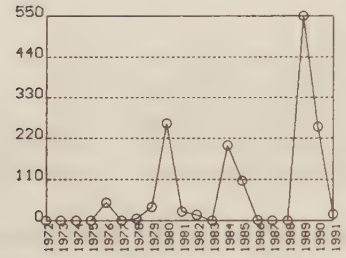
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Natantian decapods nei	1	0	4 0.0%	0	5 0.0%
Marine crabs nei	2	15	2 29.4%	0	3 0.0%
Common shrimp	3	31	1 60.8%	0	2 0.0%
Palinurid spiny lobsters nei	4	0	5 0.0%	0	6 0.0%
European lobster	5	5	3 9.8%	0	4 0.0%
Marine crustaceans nei	6	0	6 0.0%	700	1 100.0%
TOTALS		51	100.0%	700	100.0%

Line plots for crustaceans and for the entire period 1972 - 1991 are given below.



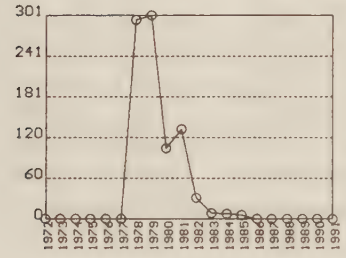
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Natantian decapods nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 36.67 %
Rank..... 1 of 7 based on:1991
Percent to total..... 78.21 % , Cumulative: 78.21 %



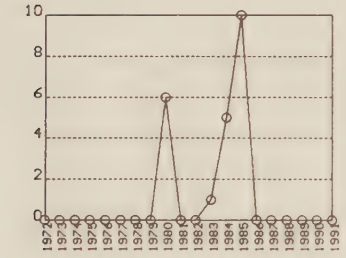
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crabs nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 41.04 %
Rank..... 2 of 7 based on:1991
Percent to total..... 21.79 % , Cumulative:100.00 %



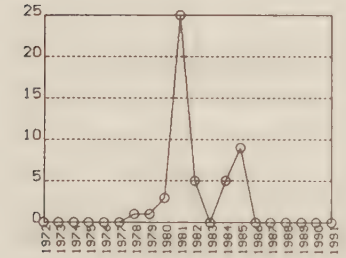
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common shrimp
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index.....-20.80 %
Rank..... 3 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



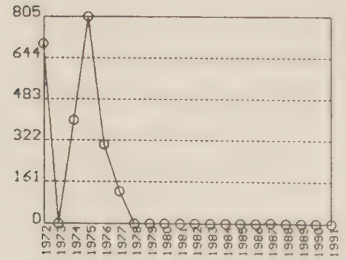
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Palinurid spiny lobsters nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 17.32 %
Rank..... 4 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



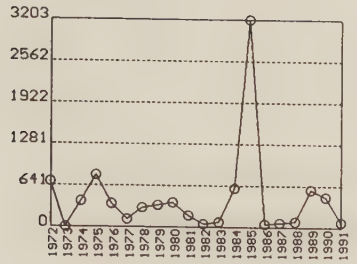
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European lobster
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 4.57 %
Rank..... 5 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine crustaceans nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index.....-69.76 %
Rank..... 6 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL CRUSTACEANS
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 3.45 %
Rank..... 7 of 7 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

10.3 Molluscs

Table 10.3.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Total production of molluscs ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Mediterranean mussel	1	4257	54.8 %	Declining
Marine molluscs nei	2	3509	45.2 %	Sharp rise
European flat oyster	3	0	0.0 %	Sharp rise
Great scallop	4	0	0.0 %	Declining
Common cuttlefish	5	0	0.0 %	Sharp rise
Common squids	6	0	0.0 %	Rising
TOTAL MOLLUSCS		7766	100.0 %	Stable (+)

Proportion coming from declining catches.....	54.8 %
from stable catches.....	0.0 %
from rising catches.....	45.2 %

Table 10.3.2

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Proportions of producers of molluscs - 1991 ranking

Turkey:77.61%, Former USSR:22.39%.

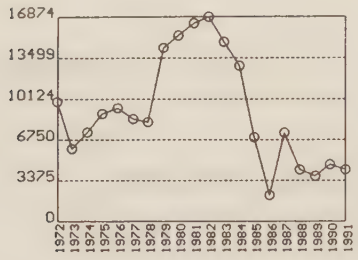
Table 10.3.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.2: Black Sea
Total production of molluscs
Comparison of ranking order and proportions in 1972, 1982 and 1991

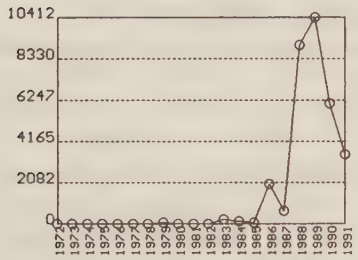
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK	AND PERCENT	CATCH (MT) -1972-	RANK	AND PERCENT
Mediterranean mussel	1	16874	1	100.0%	9900	1	100.0%
Marine molluscs nei	2	0	2	0.0%	0	2	0.0%
European flat oyster	3	0	3	0.0%	0	3	0.0%
Great scallop	4	0	4	0.0%	0	4	0.0%
Common cuttlefish	5	0	5	0.0%	0	5	0.0%
Common squids	6	0	6	0.0%	0	6	0.0%
TOTALS		16874		100.0%	9900		100.0%

Line plots for molluscs and for the entire period 1972 - 1991 are given below.



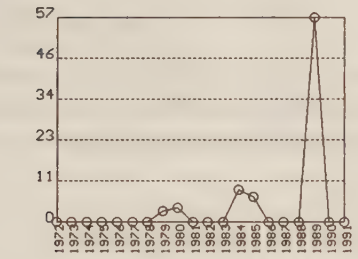
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Mediterranean mussel
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... -8.91 %
Rank..... 1 of 7 based on:1991
Percent to total..... 54.82 % , Cumulative: 54.82 %



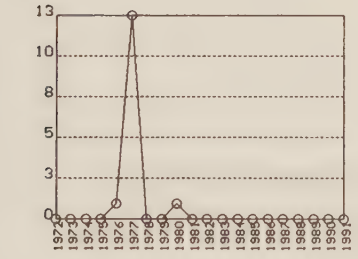
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Marine molluscs nei
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 69.58 %
Rank..... 2 of 7 based on:1991
Percent to total..... 45.18 % , Cumulative:100.00 %



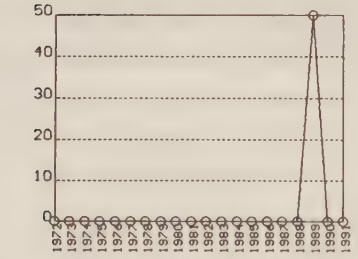
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....European flat oyster
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 54.88 %
Rank..... 3 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



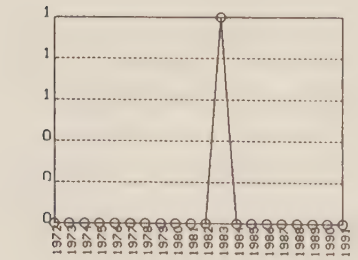
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Great scallop
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index.....-41.59 %
Rank..... 4 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



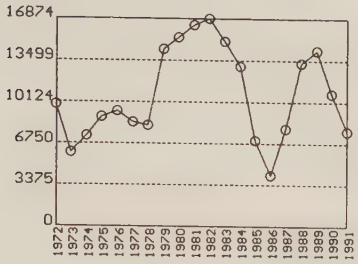
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common cuttlefish
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 71.43 %
Rank..... 5 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Common squids
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 14.29 %
Rank..... 6 of 7 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL MOLLUSCS
Area.....37.4.2 - BLACK SEA
Unit.....Metric tons

Fluctuation..... 6 %
Trend index..... 2.90 %
Rank..... 7 of 7 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

11. MEDITERRANEAN AND BLACK SEA

37.4: Black Sea Sub-Area

Division 37.4.3 - Sea of Azov

PROPORTIONS OF PRODUCTION OF DIADROMOUS FISH, MARINE FISH, CRUSTACEANS AND MOLLUSCS

Countries ranked with respect to 1991 catches

Former USSR:100%.

11.1 Diadromous and marine fish, crustaceans and molluscs.

Table 11.1.1

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.3: Sea of Azov
Production of all species ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Azov tyulka	1	24443	92.2 %	Declining
Sturgeons nei	2	964	3.6 %	Stable (-)
Sandeels(=Sandlances)	3	458	1.7 %	Rising
Gobies nei	4	247	0.9 %	Declining
Flatfishes nei	5	231	0.9 %	Stable (+)
Pontic shad	6	69	0.3 %	Declining
Marine fishes nei	7	35	0.1 %	Declining
Mediterranean mussel	8	30	0.1 %	Sharp rise
Skates	9	20	0.1 %	Sharp rise
Surmullets(=Red mullets)	10	8	0.0 %	Rising
European anchovy	11	7	0.0 %	Declining
Mullets nei	12	1	0.0 %	Sharp rise
Jack and horse mackerels nei	13	0	0.0 %	Rising
TOT SPECIES		26513	100.0 %	Declining

Proportion coming from declining catches.....	93.5 %
from stable catches.....	4.5 %
from rising catches.....	2.0 %

Note: Trends indicated as "rising" refer to the entire period 1972-1991, thus not reflecting the significant decline in production over the last years as shown in the following line plots.

Table 11.1.2

MEDITERRANEAN AND BLACK SEA - 37.4.3: Sea of Azov
Proportions of producers of all species - 1991 ranking

Former USSR:100%.

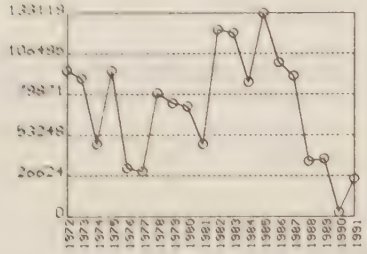
Table 11.1.3

MEDITERRANEAN AND BLACK SEA - Black Sea Sub-Area

Division 37.4.3: Sea of Azov
Production of all species
Comparison of ranking order and proportions in 1972, 1982 and 1991

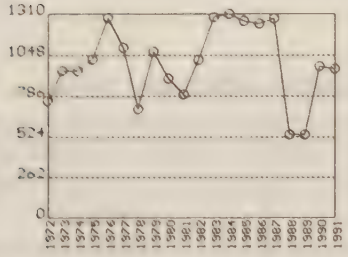
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Azov tyulka	1	122549	1 64.8%	95700	1 78.5%
Sturgeons nei	2	1022	7 0.5%	760	5 0.6%
Sandeels(=Sandlances)	3	7701	4 4.1%	0	9 0.0%
Gobies nei	4	611	8 0.3%	2700	4 2.2%
Flatfishes nei	5	1682	5 0.9%	752	6 0.6%
Pontic shad	6	1197	6 0.6%	700	7 0.6%
Marine fishes nei	7	10494	3 5.6%	3290	3 2.7%
Mediterranean mussel	8	0	13 0.0%	0	12 0.0%
Skates	9	0	11 0.0%	0	10 0.0%
Surmullets(=Red mullets)	10	46	9 0.0%	0	8 0.0%
European anchovy	11	43734	2 23.1%	18000	2 14.8%
Mullets nei	12	0	12 0.0%	0	11 0.0%
Jack and horse mackerels nei	13	10	10 0.0%	0	13 0.0%
TOTALS		189046	100.0%	121902	100.0%

Line plots for all species and for the entire period 1972 - 1991 are given below.



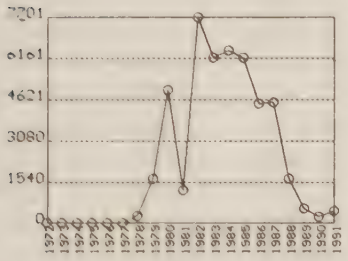
Year range.....1972-1991
Country.....FORMER USSR
Species.....Azov tyulka
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 17 %
Trend index..... -5.97 %
Rank..... 1 of 14 based on:1991
Percent to total..... 92.19 % , Cumulative: 92.19 %



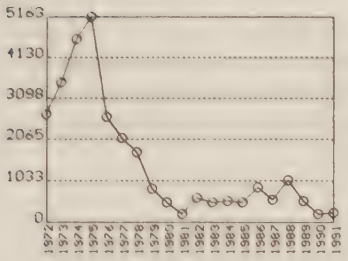
Year range.....1972-1991
Country.....FORMER USSR
Species.....Sturgeons nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... -0.06 %
Rank..... 2 of 14 based on:1991
Percent to total..... 3.64 % , Cumulative: 95.83 %



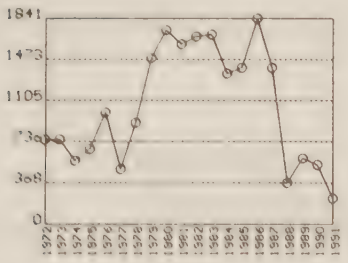
Year range.....1972-1991
Country.....FORMER USSR
Species.....Sandeels(=Sandlances)
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 21.28 %
Rank..... 3 of 14 based on:1991
Percent to total..... 1.73 % , Cumulative: 97.56 %



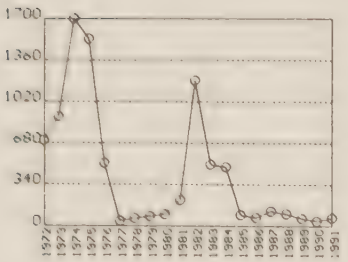
Year range.....1972-1991
Country.....FORMER USSR
Species.....Gobies nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 4 %
Trend index.....-41.88 %
Rank..... 4 of 14 based on:1991
Percent to total..... 0.93 % , Cumulative: 98.49 %



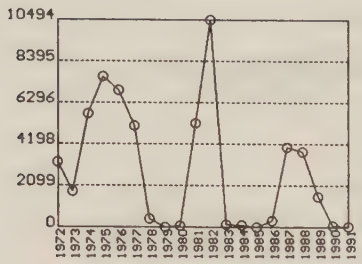
Year range.....1972-1991
Country.....FORMER USSR
Species.....Flatfishes nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 10 %
Trend index..... 0.48 %
Rank..... 5 of 14 based on:1991
Percent to total..... 0.87 % , Cumulative: 99.36 %



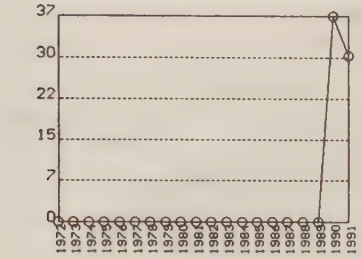
Year range.....1972-1991
Country.....FORMER USSR
Species.....Pontic shad
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 6 %
Trend index.....-38.37 %
Rank..... 6 of 14 based on:1991
Percent to total..... 0.26 % , Cumulative: 99.62 %



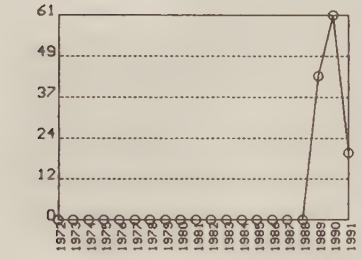
Year range.....1972-1991
Country.....FORMER USSR
Species.....Marine fishes nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 8 %
Trend index.....-23.14 %
Rank..... 7 of 14 based on:1991
Percent to total..... 0.13 % , Cumulative: 99.75 %



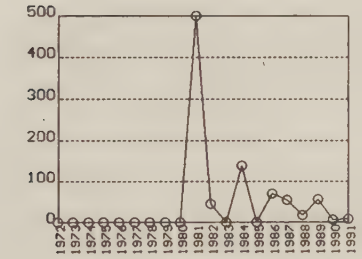
Year range.....1972-1991
Country.....FORMER USSR
Species.....Mediterranean mussel
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 85.22 %
Rank..... 8 of 14 based on:1991
Percent to total..... 0.11 % , Cumulative: 99.86 %



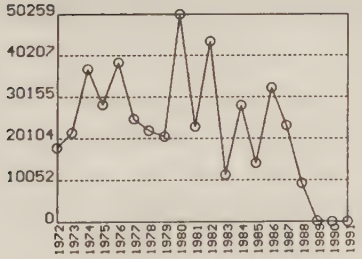
Year range.....1972-1991
Country.....FORMER USSR
Species.....Skates
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 3 %
Trend index..... 79.19 %
Rank..... 9 of 14 based on:1991
Percent to total..... 0.08 % , Cumulative: 99.94 %



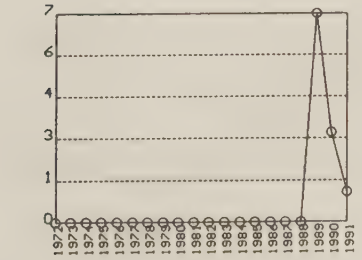
Year range.....1972-1991
Country.....FORMER USSR
Species.....Surmullets(=Red mullets)
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 14.96 %
Rank..... 10 of 14 based on:1991
Percent to total..... 0.03 % , Cumulative: 99.97 %



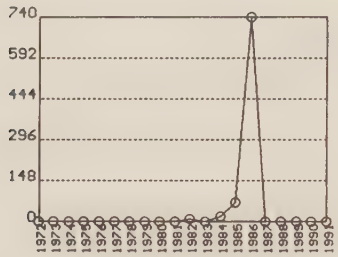
Year range.....1972-1991
Country.....FORMER USSR
Species.....European anchovy
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 22 %
Trend index.....-18.32 %
Rank..... 11 of 14 based on:1991
Percent to total..... 0.03 % , Cumulative:100.00 %



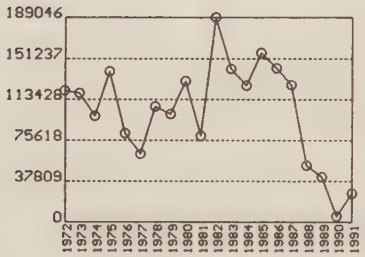
Year range.....1972-1991
Country.....FORMER USSR
Species.....Mullets nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 4 %
Trend index..... 75.76 %
Rank..... 12 of 14 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....FORMER USSR
Species.....Jack and horse mackerels nei
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 5 %
Trend index..... 41.16 %
Rank..... 13 of 14 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %

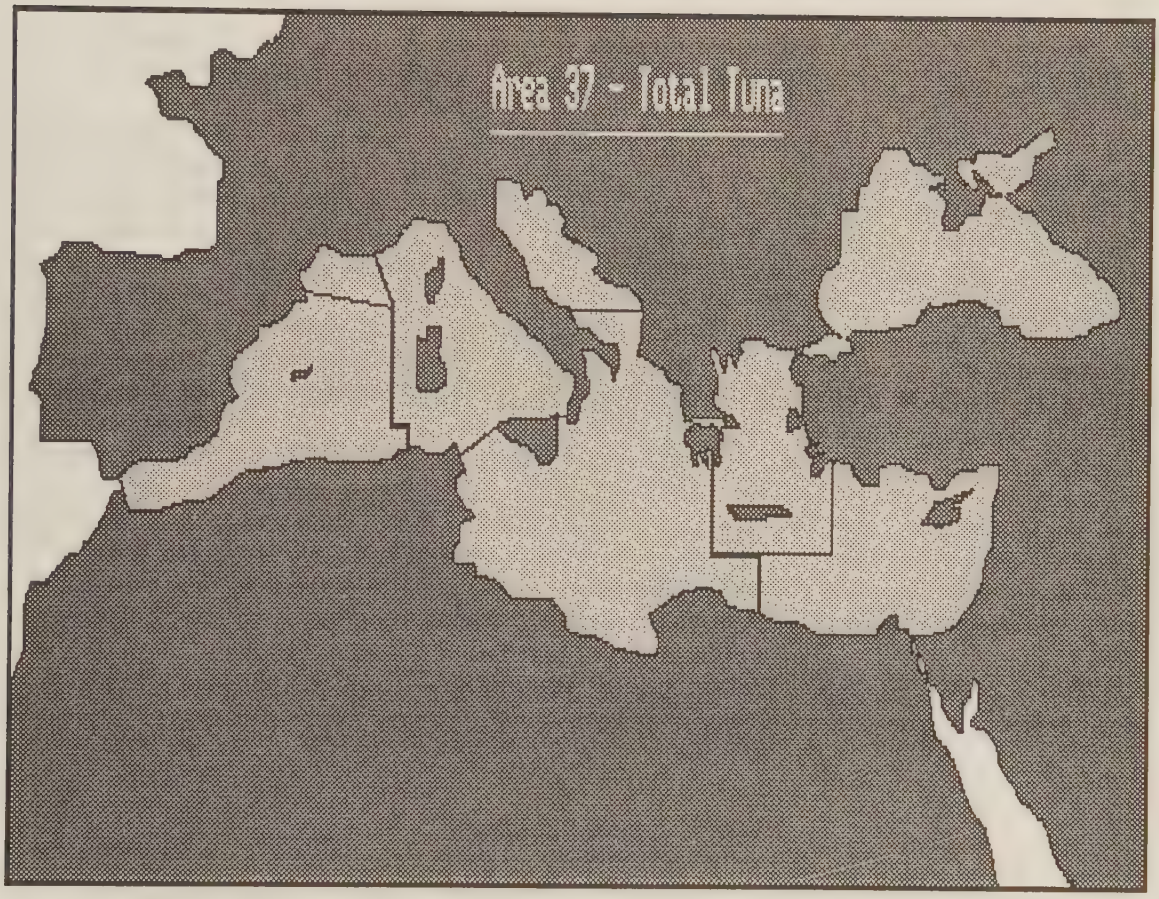


Year range.....1972-1991
Country.....FORMER USSR
Species.....ALL SPECIES
Area.....37.4.3 - SEA OF AZOV
Unit.....Metric tons

Fluctuation..... 13 %
Trend index..... -9.01 %
Rank..... 14 of 14 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

12. MEDITERRANEAN AND BLACK SEA

Area 37 - Total Tuna



PROPORTIONS OF TOTAL PRODUCTION BY COUNTRIES

Countries ranked with respect to 1991 catches

Turkey:34.36%, Italy:20.40%, Greece:10.98%, Spain:9.46%, Tunisia:8.93%, France:7.41%, Algeria:3.10%, Morocco:1.96%, Yugoslav SFR:0.93%, Egypt:0.89%, Cyprus:0.33%, Malta:0.33%, Lebanon:0.23%, Syria:0.18%, Israel:0.17%, Libya:0.15%, Japan:0.15%, Bulgaria:0.03%.

12.1 Total production from Area 37 - Total Tuna.

Table 12.1.1

MEDITERRANEAN AND BLACK SEA

Area 37 - Total Tuna
Production of all species ranked by 1991 production

SPECIES	RANK IN 1991	CATCH (MT) 1991	PERCENT OF TOTAL CATCH	LINEAR TREND
Atlantic bonito	1	25686	39.8 %	Rising
Northern bluefin tuna	2	15494	24.0 %	Rising
Swordfish	3	11603	18.0 %	Rising
Frigate and bullet tunas	4	3133	4.9 %	Rising
Bullet tuna	5	2658	4.1 %	Stable (+)
Tuna-like fishes nei	6	2261	3.5 %	Rising
Albacore	7	2112	3.3 %	Rising
Atlantic black skipjack	8	1598	2.5 %	Stable (+)
Plain bonito	9	9	0.0 %	Declining
Bigeye tuna	10	2	0.0 %	Sharp rise
Tunas nei	11	0	0.0 %	Rising
Skipjack tuna	12	0	0.0 %	Stable (+)
TOT SPECIES		64556	100.0 %	Rising

Proportion coming from declining catches.....	0.0 %
from stable catches.....	6.6 %
from rising catches.....	93.4 %

Table 12.1.2

MEDITERRANEAN AND BLACK SEA - Area 37 - Total Tuna
Proportions of producers of all species - 1991 ranking

Turkey:34.36%, Italy:20.40%, Greece:10.98%, Spain:9.46%, Tunisia:8.93%, France:7.41%, Algeria:3.10%, Morocco:1.96%, Yugoslav SFR:0.93%, Egypt:0.89%, Cyprus:0.33%, Malta:0.33%, Lebanon:0.23%, Syria:0.18%, Israel:0.17%, Libya:0.15%, Japan:0.15%, Bulgaria:0.03%.

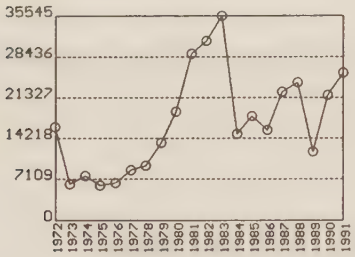
Table 12.1.3

MEDITERRANEAN AND BLACK SEA - Area 37 - Total Tuna

Production of all species
Comparison of ranking order and proportions in 1972, 1982 and 1991

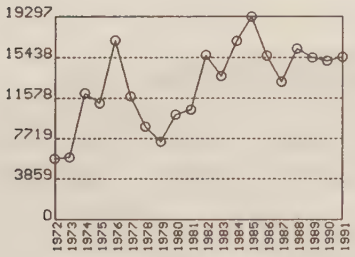
SPECIES	RANK IN 1991	CATCH (MT) -1982-	RANK AND PERCENT -1982-	CATCH (MT) -1972-	RANK AND PERCENT -1972-
Atlantic bonito	1	31207	1 48.7%	16225	1 48.4%
Northern bluefin tuna	2	15694	2 24.5%	5793	3 17.3%
Swordfish	3	5847	3 9.1%	5958	2 17.8%
Frigate and bullet tunas	4	2803	5 4.4%	401	8 1.2%
Bullet tuna	5	3234	4 5.0%	3044	4 9.1%
Tuna-like fishes nei	6	1786	7 2.8%	536	7 1.6%
Albacore	7	1272	8 2.0%	700	6 2.1%
Atlantic black skipjack	8	2281	6 3.6%	881	5 2.6%
Plain bonito	9	0	9 0.0%	6	9 0.0%
Bigeye tuna	10	0	10 0.0%	0	10 0.0%
Tunas nei	11	0	11 0.0%	0	11 0.0%
Skipjack tuna	12	0	12 0.0%	0	12 0.0%
TOTALS		64124	100.0%	33544	100.0%

Line plots for all species and for the entire period 1972 - 1991 are given below.



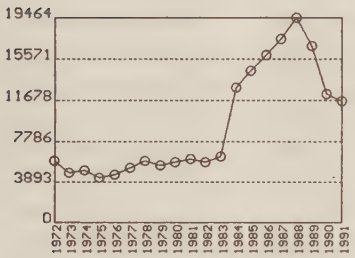
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic bonito
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 15.21 %
Rank..... 1 of 12 based on:1991
Percent to total..... 39.79 % , Cumulative: 39.79 %



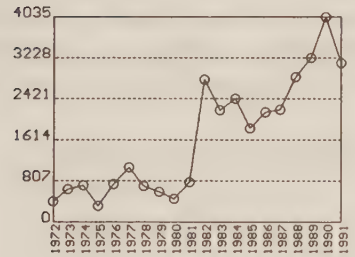
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Northern bluefin tuna
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 12 %
Trend index..... 10.87 %
Rank..... 2 of 12 based on:1991
Percent to total..... 24.00 % , Cumulative: 63.79 %



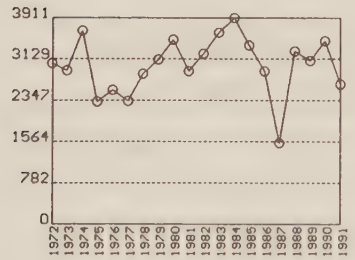
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Swordfish
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 2 %
Trend index..... 24.04 %
Rank..... 3 of 12 based on:1991
Percent to total..... 17.97 % , Cumulative: 81.76 %



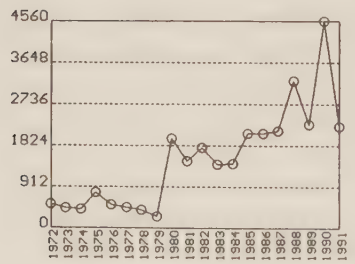
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Frigate and bullet tunas
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 7 %
Trend index..... 32.90 %
Rank..... 4 of 12 based on:1991
Percent to total..... 4.85 % , Cumulative: 86.62 %



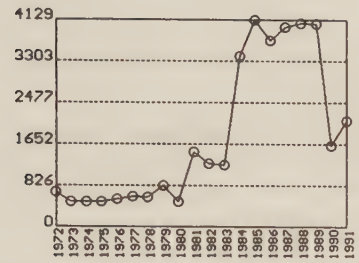
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bullet tuna
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 18 %
Trend index..... 0.68 %
Rank..... 5 of 12 based on:1991
Percent to total..... 4.12 % , Cumulative: 90.73 %



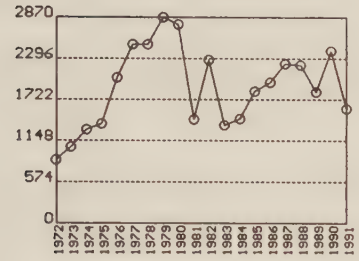
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Tuna-like fishes nei
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 32.97 %
Rank..... 6 of 12 based on:1991
Percent to total..... 3.50 % , Cumulative: 94.24 %



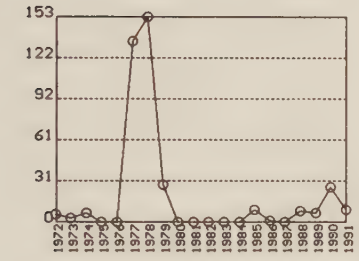
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Albacore
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 8 %
Trend index..... 32.83 %
Rank..... 7 of 12 based on:1991
Percent to total..... 3.27 % , Cumulative: 97.51 %



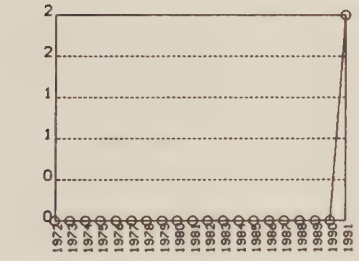
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Atlantic black skipjack
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 11 %
Trend index..... 4.69 %
Rank..... 8 of 12 based on:1991
Percent to total..... 2.48 % , Cumulative: 99.98 %



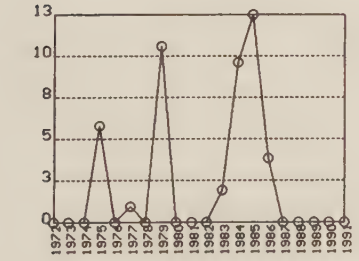
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Plain bonito
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 5 %
Trend index.....-21.89 %
Rank..... 9 of 12 based on:1991
Percent to total..... 0.01 % , Cumulative:100.00 %



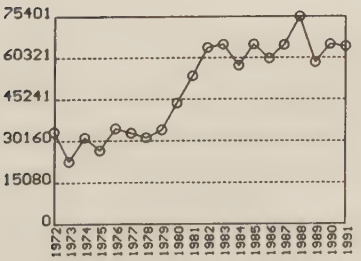
Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....Bigeye tuna
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation.....
Trend index..... 90.48 %
Rank..... 10 of 12 based on:1991
Percent to total..... 0.00 % , Cumulative:100.00 %



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....OTHER
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 14 %
Trend index..... 4.15 %
Rank.....
.....



Year range.....1972-1991
Country.....ALL COUNTRIES
Species.....TOTAL TUNA
Area.....AREA 37 - TOTAL TUNA
Unit.....Metric tons

Fluctuation..... 9 %
Trend index..... 16.24 %
Rank..... 12 of 12 based on:1991
Percent to total.....100.00 % , Cumulative:100.00 %

List of documents of the series: TRENDS IN CATCHES AND LANDINGS

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